

COMMONWEALTH *of* PENNSYLVANIA

State Employes' Retirement System

ANNUAL FINANCIAL REPORT

for calendar year 1997

Including the Independent Auditors' Report on Financial Statements for the years ended December 31, 1997 and 1996



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COMMONWEALTH OF PENNSYLVANIA
STATE EMPLOYES' RETIREMENT SYSTEM
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NICHOLAS J. MAIALE
CHAIRMAN

June 1998

Honorable Tom Ridge, Governor
Commonwealth of Pennsylvania

Members, Pennsylvania General Assembly
Members, Pennsylvania State Employes' Retirement System

Dear Governor Ridge, Legislators and Members:

The Board of Trustees of the Pennsylvania State Employes' Retirement System (SERS) is pleased to present our *Annual Financial Report* on the SERS Fund for calendar year 1997.

As chairman of the SERS Board, I am pleased to note that the Fund had a total investment rate of return of 18.0% in 1997 and a total market value of $21.3 billion as of December 31, 1997. By comparison, the Fund's annualized investment rate of return for the past five years was 13.8%, and the annualized investment rate of return for the past 10 years was 13.0%.

These substantial returns have enabled SERS to maintain fully-funded status since 1992. They also validate the Board's adherence to two key principles:

- prudent management of Fund assets, and
- ensuring payment of benefits promised by the Commonwealth to SERS retirees and beneficiaries.

Rest assured that the SERS Board, staff and I will continue to pursue prudent investment strategies to assure the solvency of the Fund and the quality of pension-related services to all SERS members.

Sincerely,

Nicholas J. Maiale
SERS Board Chairman

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Honorable Nicholas J. Maiale
Chairman



Honorable Roy C. Afflerbach
State Senator



Honorable Barbara Hafer
State Treasurer



Honorable Gibson E. Armstrong
State Senator



Edward J. Keller
Executive Director, AFSCME Council 13



Honorable Robert A. Bittenbender
State Secretary of the Budget



Honorable Edward J. Lucyk
State Representative



James E. Nevels *(1998)*
Financial Consultant



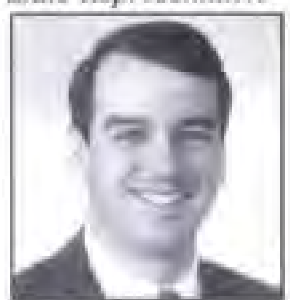
Honorable M. Joseph Rocks
Retired Member and Former State Senator



Honorable Thomas G. Paese
State Secretary of Administration



Honorable Jere L. Strittmatter
State Representative



K. Paul Muench *(to 1998) Budget Analyst, House Majority Appropriations Committee*



The Pennsylvania State Employes' Retirement System lost a true and diligent champion in the Fund's successful pursuit of solvency and pension security with the death of Board of Trustees member K. Paul Muench on January 23, 1998.

For 18 years as a member of the Board and throughout more than 39 years in state government, Paul's was indeed a distinguished career in public service. During his "watch" and due in no small measure to his efforts, the Fund grew from $2.5 billion to over $21 billion, while SERS implemented a successful Deferred Compensation Program for active state employes and improved member services by establishing a statewide system of seven Retirement Counseling Centers.

Always direct in his questioning of candidates for the Fund's investments, Paul was an untiring and diligent trustee. In his job on the staff of the Appropriations Committee of the state House of Representatives, he also was a vital link between the Fund and the Legislature, contributing greatly to the growth, diversity, and sophistication of the Fund. On a personal level, Paul had a sharp wit and disarming charm that will be missed by all who knew and worked with him.

Sadly, Paul did not live to long enjoy his own retirement, having just left state service in October 1997. He was 76. That he remained a member of the SERS Board to the end was a distinction of which we all may be sure he was quite proud.

At its March 18, 1998, meeting, the Board adopted a resolution recognizing Paul's long and dedicated service to SERS, which spanned nearly two decades, from 1980 until his death.

K. Paul Muench leaves to us a legacy and a standard of service that will guide the SERS Board and the Fund for many years to come.

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Administrative Support

John Brosius
Executive Director

Dale H. Everhart
Assistant Executive Director

Francis J. Donlevy
Director of Financial Management

Harold E. Dunbar
Chief Counsel

Geoffrey S. Yuda
Information Officer

Peter M. Gilbert
Chief Investment Officer

Stewart A. Dier
David J. Kalman
Karen N. Nicely
Diane Sterthous
John C. Winchester
Investment Office Directors

Leonard M. Knepp
Director, Internal Audit

Investment Consultants

RogersCasey & Associates
General Consultant

Cambridge Associates
Venture Capital and Alternative Investments Consultant

The Townsend Group
Real Estate Consultant

Hamilton Lane *(to 1998)*
Specialty Consultant

General Service Providers

Hay/Huggins Company, Inc.
Actuary

State Street Bank
Agent Bank and Trust Accounting Services

KPMG Peat Marwick LLP
Independent Auditor

Mission Statement

I. **Plan Administration:** To administer the retirement benefits plan for state employes and elected officials in accordance with Pennsylvania statutes;

II. **Member Services:** To provide effective services to all active and retired members;

III. **Management of Retirement Fund Assets:** To accumulate, manage and disburse the retirement Fund assets in accordance with fiduciary standards and at a reasonable cost to Commonwealth taxpayers;

IV. **Investment Policy:** To maximize investment returns while exercising a prudent person investment policy.

Investment Policy

The State Employes' Retirement Board adopted a formal Statement of Investment Policy in 1979. It has been revised periodically, principally to reflect and incorporate legislative changes governing investments. The purpose of the statement is to formalize the Board's investment objectives, policies, and procedures, to establish guidelines for the investment of Fund assets, and to define the duties and responsibilities of the various entities involved in the investment process. The major elements of the statement are:

- As fiduciaries, the Board will exercise that degree of judgment, skill, and care under the circumstances then prevailing which persons of prudence, discretion, and intelligence, who are familiar with such matters, exercise in the management of their own affairs in investment matters;
- The Fund's overall investment objective is to provide a total rate of return, over full economic cycles, which exceeds the return of a fully diversified market portfolio within each asset class. The Board seeks to meet this objective within acceptable risk parameters through adherence to a policy of diversification of investments by type, industry, quality, and geographic location;
- The Board employs an investment staff and also contracts with investment advisors and consultants to provide expert, professional judgment in all investment decisions;
- An annual *Investment Plan* is prepared to control the allocation of funds during the year among investment advisors and categories of assets;
- Guidelines are established for each category of assets used by the Fund's investment advisors to provide a framework for monitoring quality, diversification, and liquidity; and
- Where investment characteristics, including yield, risk, and liquidity, are equivalent, the Board's policy favors investments which have a positive impact on the economy of Pennsylvania.

Investment Objectives

To assure an adequate accumulation of reserves in the Fund at the least cost to the citizens of the Commonwealth and to provide some protection against the erosion of principal by inflation, the long-term investment objectives of the Fund, are:

- Achieve and maintain the State Employes' Retirement Fund in excess of Actuarial Accrued Benefit Liability;
- Over the long run, achieve a positive real total rate of return (with inflation measured by the GDP Implicit Price Deflator);
- Over the long run, achieve an absolute total rate of return not less than the actuarial investment return assumption;
- Achieve in Domestic Stocks a total return that exceeds the total return of the Wilshire 5000 Index;
- Achieve in International Stocks a total return that exceeds the total return of the SERS Custom International Stock Index;
- Achieve in the Fixed Income asset class a total return that exceeds the total return of the SERS Fixed Income Custom Index;
- Achieve in the Equity Real Estate asset class a total return that exceeds the total return of the NCREIF Index;
- Achieve in the Cash asset class a total return that exceeds the total return on U.S. Treasury Bills (90 days);
- Private Equity: Achieve in the Venture Capital asset class a total return that exceeds either the Venture Economics' relevant Vintage Year Median Returns or relevant returns furnished for benchmark purposes by SERS's Venture Capital/Alternative Investments consultant.
  Achieve in the Alternative Investments asset class a total return that exceeds either market returns for similar types of alternative investments or relevant returns furnished for benchmark purposes by SERS's Venture Capital/Alternative Investments consultant.

Total return includes income and both realized and unrealized gains and losses and is computed on market value. The Board seeks to meet these objectives within acceptable risk parameters through adherence to a policy of diversification of investments by type, industry, investment manager style, and geographic location.





INVESTMENT PROGRAM SUMMARY

Section 1



Investment Program Overview

as of December 31, 1997

The assets of the State Employes' Retirement System (SERS) are administered by the SERS Board of Trustees (Board). The Board has adopted an Investment Policy that incorporates the provisions of the Retirement Code which govern the investment of SERS's assets. The Policy provides investment objectives and guidelines.

A *Five-Year Investment Plan* is reviewed and updated annually for strategic asset allocation purposes, as well as for diversification needs within each asset class.

Market Value [1]

SERS's assets had an unaudited market value of approximately $21,307.7 million on December 31, 1997.

SERS Asset Allocation ($ in millions)

Asset Class	Market Value $	Market Value %	1997 Target Allocation
U.S. Stock	$9,315.9	43.7%	38.0%
International Stock	3,613.4	17.0%	20.0%
Fixed Income	4,751.6	22.3%	23.5%
Cash	20.1	0.1%	0.0%
Tactical Asset Allocation	1,147.8	5.4%	5.0%
* Real Estate	1,719.9	8.1%	10.0%
* Venture Capital	328.1	1.5%	1.3%
* Alternative Investments	410.8	1.9%	2.2%
Total	$21,307.7	100.0%	100.0%

Investment Advisors

SERS had 112 external investment advisors to manage portfolios. Of these, 46 were in the public markets domain and 66 covered private equity and real estate.

- 17 U.S. stock investment advisors
- 12 international stock investment advisors
- 2 currency overlay investment advisors
- 13 fixed income investment advisors
- 1 cash investment advisor
- 1 tactical asset allocation investment advisor
- 19 real estate investment advisors
- 22 venture capital limited partnership managing general partners
- 25 alternative investment limited partnership managing general partners

In addition, two U.S. stock investment advisors were approved by the Board, and one U.S. stock relationship and one fixed income advisor were terminated.

Investment Portfolios

SERS had 154 investment portfolios/accounts. Of these, 52 managed public market investments, while 102 covered private equity and real estate.

- 21 U.S. stock portfolios
- 13 international stock portfolios
- 2 currency overlay investment advisors
- 14 fixed income portfolios
- 1 cash portfolio
- 1 tactical asset allocation portfolio
- 29 real estate portfolios
- 34 venture capital limited partnership interests
- 39 alternative investment limited partnership interests

In addition, two U.S. stock portfolios were approved by the Board, and one U.S. stock portfolio and one fixed income advisor were terminated. Several investment advisors manage multiple portfolios for SERS.

[1] *Refer to the footnote at the end of this section for a technical explanation of values*

* *As of September 30, 1997, adjusted for fourth quarter cash*

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Asset Allocation as of December 31, 1997

U.S. Stock	($ in millions) Market Value	% of Domestic Stocks	% of Total Stocks	% of Total Fund
Passively Managed Portfolios				
Barclays - Equity Index Fund P (S&P 500)	$ 4,003.9	43.0%	31.1%	18.8%
Barclays - Extended Equity Market Fund	674.3	7.2%	5.2%	3.2%
Domestic Passive Stocks Total	$ 4,678.2	50.2%	36.3%	21.9%
Actively Managed Portfolios				
Dietche & Field Advisers	91.3	1.0%	0.7%	0.4%
Emerald Advisers - PA	81.1	0.9%	0.6%	0.4%
Fidelity Management Trust Company	153.0	1.6%	1.2%	0.7%
Iridian Asset Management	334.7	3.6%	2.6%	1.6%
J.P. Morgan Investment Management	166.6	1.8%	1.3%	0.8%
Loomis, Sayles & Company	144.0	1.5%	1.1%	0.7%
Lord Abbot & Co.	296.0	3.2%	2.3%	1.4%
MacKay Shields Financial	151.5	1.6%	1.2%	0.7%
Mellon Equity Associates - PA	89.0	1.0%	0.7%	0.4%
Mellon Equity Associates - Special Equity	662.0	7.1%	5.1%	3.1%
Miller, Anderson & Sherrerd	501.0	5.4%	3.9%	2.3%
Pilgrim Baxter & Associates	273.7	2.9%	2.1%	1.3%
Provident Investment Counsel	625.5	6.7%	4.9%	2.9%
Provident Investment Counsel - Stellar Fund	93.8	1.0%	0.7%	0.4%
Sturdivant & Co.	44.8	0.5%	0.3%	0.2%
Trinity Investment Management	595.7	6.4%	4.6%	2.8%
Trinity Small Cap Value	107.2	1.2%	0.8%	0.5%
Rosenberg Institutional	209.2	2.2%	1.6%	1.0%
Zevenbergen Capital	17.5	0.2%	0.1%	0.1%
Liquidation Account	0.1	0.0%	0.0%	0.0%
U.S. Active Stock Total	$ 4,637.7	49.8%	36.0%	21.8%
U.S. Stock Total	$ 9,315.9	100.0%	72.3%	43.7%

International Stock	($ in millions) Market Value	% of Int'l Stocks	% of Total Stocks	% of Total Fund
Passively Managed Portfolios				
Barclays - Europe Funds	$ 474.8	13.3%	3.7%	2.2%
Barclays - Australia/New Zealand Funds	31.7	0.9%	0.2%	0.1%
International Passive Stocks Total	$ 506.5	14.2%	3.9%	2.4%
Actively Managed Portfolios				
BEA Associates - Core	$ 505.3	14.1%	3.9%	2.4%
GAM International Management - Asia	103.3	2.9%	0.8%	0.5%
J.P. Morgan Investment Management - Japan	234.0	6.5%	1.8%	1.1%
Marathon Asset Management - Europe	207.4	5.8%	1.6%	1.0%
Mercury Asset Management - Small	203.1	5.7%	1.6%	1.0%
Miller, Anderson & Sherrerd - Core	559.7	15.6%	4.3%	2.6%
Morgan Stanley - Asia	70.2	2.0%	0.5%	0.3%
Pictet International Management - Small	233.3	6.5%	1.8%	1.1%
Scottish Widows Investment Mgmnt.-Europe	232.1	6.5%	1.8%	1.1%
Seligman Henderson - Small	179.1	5.0%	1.4%	0.8%
Templeton Investment Counsel - Core	542.3	15.2%	4.2%	2.5%
International Liquidation Account	0.4	0.0%	0.0%	0.0%
International Active Stock Total	$ 3,070.2	85.8%	23.8%	14.4%
International Stock Total	$ 3,576.7	100.0%	27.7%	16.8%
U.S. and International Stock Total	$12,892.6		100.0%	60.5%

Asset Allocation as of December 31, 1997

Currency Overlay	($ in millions) Market Value	% of Total Currency	% of Total Fund
Pareto Partners	$ 14.1	38.4%	0.1%
Record Treasury	22.6	61.6%	0.1%
Overlay Total	$ 36.7	100.0%	0.2%

Fixed Income	($ in millions) Market Value	% of Total Fixed Income	% of Total Fund
Passively Managed Core Portfolios			
Mellon Bond Associates	$ 629.5	13.2%	3.0%
Actively Managed Core Portfolios			
Fischer Francis Trees & Watts - International	$ 454.5	9.5%	2.1%
J. P. Morgan Investment Management	585.7	12.3%	2.7%
Miller, Anderson & Sherrerd - Domestic	895.2	18.8%	4.2%
Miller, Anderson & Sherrerd - Global	820.8	17.3%	3.9%
P. G. Corbin Asset Management	10.5	0.2%	0.0%
Smith Graham & Co.	27.9	0.6%	0.1%
Active Core Fixed Income Port. Total	$ 2,794.6	58.8%	13.1%
Core Fixed Income Portfolios Total	$ 3,424.0	72.1%	16.1%
Actively Managed Specialty Portfolios			
CIGNA Investments	$ 0.2	0.0%	0.0%
CECG CoreStates	0.0	0.0%	0.0%
Fidelity Management Trust Company - CMBS	83.6	1.8%	0.4%
John Hancock	172.7	3.6%	0.8%
Legg Mason Real Estate Advisors	340.9	7.2%	1.6%
Trust Company of the West - Funds III	1.8	0.0%	0.0%
W. R. Huff Asset Management	728.3	15.3%	3.4%
Active Specialty Fixed Income Port. Total	$ 1,327.5	27.9%	6.2%
Fixed Income Total	$ 4,751.6	100.0%	22.3%

Cash	($ in millions) Market Value	% of Total Cash	% of Total Fund
Pennsylvania State Treasury - STIF [1]	$ 20.1	100.0%	0.1%

Tactical Asset Allocation	($ in millions) Market Value	Allocation (Stocks / Bonds / Cash)	% of Total Fund
Barclays - Enhanced US 70/30 TAA Fund	$ 1,147.8	75%/25%/0%	5.4%

[1] *SERS investment advisors' cash balances are reflected within their own market values but in fact are invested in the Pennsylvania Treasury Short Term Investment Fund (STIF). The Pennsylvania Treasury STIF balance was $503.8 million.*

Asset Allocation as of December 31, 1997

Real Estate	($ in millions)	% of Total	% of Total
Separate Account Portfolios	Market Value	Real Estate	Fund
CRA Real Estate Securities	$ 149.4	8.7%	0.7%
Forest Investment Associates	79.4	4.6%	0.4%
Heitman/JMB	426.8	24.8%	2.0%
LaSalle Partners	91.1	5.3%	0.4%
Lowe Enterprises	204.7	11.9%	1.0%
RAI Real Estate Advisors	127.3	7.4%	0.6%
Separate Account Portfolios Total	$ 1,078.7	62.7%	5.1%
Pooled Fund Portfolios			
Allegis - 4 pooled funds	$ 88.0	5.1%	0.4%
Alex Brown	0.7	0.0%	0.0%
Blackstone	25.1	1.5%	0.1%
Copley CIIF-II	12.4	0.7%	0.1%
Corporate Property Investors	124.6	7.2%	0.6%
Goldman Sachs - Whitehall	70.3	4.1%	0.3%
Heitman - California Land Venture	1.3	0.1%	0.0%
JMB Group Trust III	38.6	2.2%	0.2%
John Hancock	8.2	0.5%	0.0%
Metric Apartment Fund - 2 pooled funds	35.2	2.0%	0.2%
Oxford Real Estate	23.3	1.4%	0.1%
PSI III	20.7	1.2%	0.1%
Sentinel Corporation	44.3	2.6%	0.2%
Starwood Capital	22.4	1.3%	0.1%
Westbrook	30.7	1.8%	0.1%
TCW VI/OCM Opportunity Fund A & B	95.5	5.6%	0.4%
Pooled Fund Portfolios Total	$ 641.2	37.3%	3.0%
Real Estate Total *	$ 1,719.9	100.0%	8.1%

* *As of September 30, 1997, adjusted for fourth quarter cash.*

Asset Allocation as of December 31, 1997

Venture Capital	($ in millions) Market Value	% of Total Venture Capital	% of Total Fund
APA/Fostin - Fund I	$ 5.9	1.8%	0.0%
Advent VII	37.7	11.5%	0.2%
Advent VIII	4.7	1.4%	0.0%
Bachow III	28.0	8.5%	0.1%
CEO Venture Fund S & II	11.2	3.4%	0.1%
Edison III	26.2	8.0%	0.1%
Fairview Capital	3.9	1.2%	0.0%
Fostin Capital I	0.4	0.1%	0.0%
Fostin Capital II	2.3	0.7%	0.0%
Grotech Partners III	1.2	0.4%	0.0%
Grotech Partners IV	19.0	5.8%	0.1%
Healthcare Ventures III	10.6	3.2%	0.0%
Healthcare Venture V	5.0	1.5%	0.0%
Keystone II	1.7	0.5%	0.0%
Keystone IV	11.6	3.5%	0.1%
Keystone V	1.8	0.5%	0.0%
NEA VI	32.2	9.8%	0.2%
NEA VII	10.7	3.2%	0.0%
NEPA Venture I	1.3	0.4%	0.0%
NEPA Venture II	9.2	2.8%	0.0%
NEPA - MidAtlantic Venture III	3.8	1.2%	0.0%
PA Fund I (APA/Fostin II)	17.5	5.3%	0.1%
PA Fund III	13.3	4.1%	0.1%
Point Venture Partners	0.3	0.1%	0.0%
Polaris Venture Capital	10.5	3.2%	0.0%
PNC Venture Group I	0.2	0.1%	0.0%
Sprout VII	14.9	4.6%	0.1%
Summit Venture IV	21.2	6.5%	0.1%
Technology Leaders II	4.3	1.3%	0.0%
TDH II	0.7	0.2%	0.0%
Weston Presidio	9.2	2.8%	0.0%
Zero Stage Capital-II	0.4	0.1%	0.0%
Distribution Account	7.5	2.3%	0.0%
Venture Capital Total *	$ 328.1	100.0%	1.5%

* *As of September 30, 1997, adjusted for fourth quarter cash*

Asset Allocation as of December 31, 1997

Alternative Investments	($ in millions) Market Value	% of Total Alternative Investments	% of Total Fund
ABRY Broadcast Partners III	$ 1.9	0.5%	0.0%
APAX Partners - France	3.1	0.8%	0.0%
APAX Partners - Germany	4.2	1.0%	0.0%
APAX Partners - Germany II	1.0	0.2%	0.0%
APAX Partners - UK IV	1.0	0.2%	0.0%
B III Capital Partners (DDJ)	16.4	4.0%	0.1%
Blackstone II	22.6	5.5%	0.1%
Blackstone III	5.0	1.2%	0.0%
Brentwood Associates Buyout Fund	9.5	2.3%	0.0%
Charterhouse II	48.3	11.8%	0.2%
Charterhouse III	2.6	0.6%	0.0%
Clayton, Dubilier & Rice V	13.8	3.4%	0.1%
Code, Hennesy & Simmons I	4.0	1.0%	0.0%
Code, Hennesy & Simmons II	10.8	2.6%	0.1%
Code, Hennesy & Simmons III	3.2	0.8%	0.0%
DLJ Merchant Banking Fund II	17.2	4.2%	0.1%
Frontenac VII	7.8	1.9%	0.0%
Golder, Thoma, Cressey & Rauner V	5.5	1.3%	0.0%
Hellman & Friedman II	10.9	2.6%	0.1%
Hellman & Friedman III	20.1	4.9%	0.1%
Hancock IPEP II	2.4	0.6%	0.0%
Kelso V	46.8	11.4%	0.2%
Landmark IV	3.7	0.9%	0.0%
Landmark V	8.1	2.0%	0.0%
Madison Dearborn I	15.8	3.8%	0.1%
Madison Dearborn II	9.3	2.3%	0.0%
Media Communications Partners	6.7	1.6%	0.0%
Murphy & Fauver	1.9	0.5%	0.0%
Oaktree Opportunities	28.4	6.9%	0.1%
Oaktree Principal Opportunities	9.2	2.2%	0.0%
RR&Z PA Fund I	1.1	0.3%	0.0%
RR&Z Private Equity Fund	0.2	0.0%	0.0%
Schroder Ventures UK III	3.8	0.9%	0.0%
Schroder Ventures UK IV	3.3	0.8%	0.0%
Schroder Ventures UK V	5.9	1.4%	0.0%
Schroder European Ventures	0.8	0.2%	0.0%
TCW - Fund V	32.2	7.8%	0.2%
TPG Partners II	15.9	3.9%	0.1%
Vestar Capital III	6.5	1.6%	0.0%
*Alternative Investment Total **	$ 410.8	100.0%	1.9%

** As of September 30, 1997, adjusted for fourth quarter cash*

Numbers may not add due to rounding

Summary: U.S. Stock

as of December 31, 1997

U.S. and international stocks comprise the stock asset class, one of eight major asset classes SERS uses to diversify the investments of the Fund. SERS's investment plan diversifies stock investments and balances stock management styles. SERS contracts with external investment advisors to manage portfolios.

Policy

Stock investments are used by the Fund primarily because their expected large return premiums versus inflation will, if realized, help preserve and enhance the real value of the Fund over long periods of time. The stock asset class is managed on a total return basis.

SERS's long-term investment objective in the U.S. stock component of the stock asset class is to achieve a risk-adjusted total return, net of fees, that exceeds the total return of the Wilshire 5000 Index.

Stock investments emphasize, but are not limited to, publicly traded securities that provide SERS with an equity interest in private sector concerns (e.g., common stock, preferred stock, convertible preferred stock, convertible bonds).

SERS's *1997 Annual Five-Year Investment Plan* targeted an eventual allocation of 34.0% of Fund assets to U.S. stocks. In turn, the plan targeted the investment of 70% of U.S. stocks in large capitalization stocks and 30% in medium/small capitalization stocks, and also provided for a balance in value and growth investment styles. The 1997 plan targeted 50.0% of U.S. stocks to be indexed.

Market Value

U.S. stocks had a $9,315.9 million market value, or 43.7% of the Fund's $21,307.7 million market value, on December 31, 1997.

Investment Advisors

SERS had contracts with 17 external investment advisors to manage U.S. stock portfolios.

Investment Portfolios

SERS had 21 U.S. stock portfolios managed by the 17 investment advisors.

As of December 31, 1997, 71.9% of SERS's U.S. stock allocation was in large capitalization stock strategies, and 28.1% was in medium/small capitalization stock strategies.

The U.S. stock portfolios can be classified by investment style as follows:

- value at 14.8%;
- growth at 15.3%; and
- core at 69.9%.

SERS had 19 actively managed portfolios (49.8% of U.S. stocks) and two passively managed index portfolios (50.2% of U.S. stocks). The active managers search out superior investment opportunities, while the passively managed portfolios provide broad core diversification and are designed to provide market performance at a low cost.

U.S. Stock Investment Advisor	Investment Style	* Market Value of Portfolio as of 12/31/97 ($ in millions)
1. Barclays Global Investors Equity Index Fund P	S&P 500 - index	$4,003.9
Extended Equity Market Fund	Wilshire 4500 - index	674.3
2. Dietche & Field Advisors	small cap relative value stocks	91.3
3. Emerald Advisors	PA stocks	81.1
4. Fidelity Management Trust Company	S&P 500, risk controlled	153.0
5. Iridian Asset Management	medium cap change catalyst stocks	334.7
6. J.P. Morgan Investment Management	S&P 500, risk controlled	166.6
7. Loomis, Sayles & Company (D.C.)	large/medium cap value stocks	144.0
8. Lord, Abbett & Co.	large/medium cap value stocks	296.0
9. MacKay Shields Financial Corporation	large/medium cap value stocks	151.5
10. Mellon Equity Associates - PA Stocks	PA Stocks	89.0
Mellon Equity Associates - Special Equity	Wilshire 4500, industry and risk factors neutral	662.0
11. Miller Anderson & Sherrerd	large/medium cap growth stocks	501.0
12. Pilgrim Baxter & Associates	medium cap aggressive growth stocks	273.7
13. Provident Investment Counsel (PIC)	large/medium cap aggressive growth stocks	625.5
PIC Stellar Fund	small cap growth stocks	93.8
14. Rosenberg Institutional Equity Management	Russell 2500, industry and risk factors neutral	209.2
15. Sturdivant & Co.	S&P 500 relative value stocks	44.8
16. Trinity Investment Management	large/medium cap value stocks, industry neutral	595.7
Trinity Investment Management	small cap value stocks, industry neutral	107.2
17. Zevenbergen Capital	large/medium cap growth stocks	17.5
One liquidating account		0.1
Total		$9,315.9

* *Includes stocks and cash which the manager had available for investment.*

Numbers may not add due to rounding.

Summary: International Stock

as of December 31, 1997

International and U.S. stocks comprise the stock asset class, one of eight major asset classes SERS uses to diversify the investments of the Fund. SERS's investment plan diversifies stock investments and balances stock management styles, and SERS contracts with external investment advisors to manage portfolios.

Policy

Stock investments are employed by the Fund primarily because their expected large return premiums versus inflation will, if realized, help preserve and enhance the real value of the Fund over long periods of time. The stock asset class is to be managed on a total return basis.

SERS's long-term investment objective in the international stock component of the stock asset class is to achieve a risk-adjusted total return, net of fees, that exceeds the total return of the SERS International Stock Custom Index.

SERS's *1997 Annual Five-Year Investment Plan* targeted an eventual allocation of 20.0% of assets to international stocks, with 80% to go to large capitalization stock strategies and 20% to medium/small capitalization stock strategies.

Market Value

International stocks had a $3,613.4 million market value, or 17.0% of the total Fund's $21,307.7 million market value, on December 31, 1997. The fair value of forward exchange contracts in the currency overlay program amounted to $36.7 million.

Investment Advisors

SERS had contracts with 12 external investment advisors to manage international stock portfolios and contracts with two external advisors to manage a currency overlay program.

Investment Portfolios

SERS had 13 stock portfolios managed by the 12 investment advisors in the international stock area and two portfolios for the currency overlay program.

As of December 31, 1997, 82.8% of SERS's international stock allocation was in large capitalization stock strategies, and 17.2% was in medium/small capitalization stock strategies. SERS had 11 actively managed international portfolios and two index portfolios.

International Stock Investment Advisor	Investment Style	* Market Value of Portfolio as of 12/31/97 ($ in millions)
1. Barclays Global Investors Europe Funds	Europe stocks - index	$ 474.8
Australia and New Zealand Funds	Australia and New Zealand stocks - index	31.7
2. BEA Associates	international growth stocks - core	505.3
3. GAM International Management	Pacific Basin ex Japan stocks	103.3
4. Marathon Asset Management	Europe stocks	207.4
5. Mercury Asset Management International	international medium/small cap stocks	203.1
6. Miller Anderson & Sherrerd	international value stocks - core	559.7
7. J.P. Morgan Investment Management	Japan stocks, sector neutral	234.0
8. Morgan Stanley Asset Management	Asia ex Japan stocks	70.2
9. Pictet International Management	75% international small cap stocks / 25% emerging markets	233.3
10. Scottish Widows Investment Management	Europe stocks	232.1
11. Seligman Henderson Co.	international medium/small cap stocks	179.1
12. Templeton Investment Counsel	international value stocks - core	542.3
Four liquidating accounts		0.4
Total International		$3,576.7
1. Pareto Partners	currency overlay	$ 14.1
2. Record Treasury	currency overlay	22.6
Total Currency Overlay		$ 36.7
Total International and Currency Overlay		$3,613.4

* *Includes stocks and cash which the manager had available for investment*

Numbers may not add due to rounding

Summary: Fixed Income

as of December 31, 1997

Fixed income is one of eight major asset classes SERS uses to diversify investments of the Fund. SERS's investment plan diversifies fixed income investments and balances fixed income management styles. It is SERS's practice to contract with external investment advisors to manage portfolios.

Policy

Fixed income investments are employed primarily because of their ability to serve as a hedge against disinflation and/or deflation, their general ability to produce current income in the form of periodic interest payments, and because such investments help diversify the overall Fund. The asset class is to be managed on a total return basis.

SERS's long–term investment objective in this asset class is to achieve a risk–adjusted total return, net of fees, that exceeds the total return of the SERS Fixed Income Custom Index.

SERS's *1997 Annual Five–Year Investment Plan* targeted an eventual allocation of 23% of assets to the fixed income asset class, with 75% of this amount targeted to core strategies and 25% to specialty strategies. The specialty strategies include whole–loan mortgages, high yield/special credits, commercial mortgage backed securities, and private placements.

Market Value

Fixed income had a $4,751.6 million market value, or 22.3% of the total Fund's $21,307.7 million market value, on December 31, 1997.

Investment Advisors

SERS had contracts with 13 external investment advisors to manage portfolios within the fixed income asset class as of December 31, 1997.

Investment Portfolios

SERS had a total of 14 portfolios within this asset class. The asset class is divided into core and specialty segments. Core portfolios utilize a broad array of fixed income securities, while specialty portfolios focus on well–defined sectors and opportunistic strategies within the fixed income market.

Core: SERS had six actively managed core bond portfolios with a market value of $2,794.6 million and one passively managed core bond portfolio with a market value of $629.5 million. The combination of core portfolios represented 72.1% of the asset class. The core segment of the asset class includes exposure to both international and global fixed income.

Specialty: SERS had one whole–loan mortgage portfolio with a market value of $340.9 million, three high yield/special credits/commercial mortgage backed securities portfolios with a market value of $813.7 million, and two private placement portfolios with a market value of $172.9 million.

	Fixed Income Investment Advisor	Investment Style	* Market Value of Portfolio as of 12/31/97 ($ in millions)
	Core		
1.	P.G. Corbin Asset Management	active domestic fixed income	$ 10.5
2.	Fischer Francis Trees & Watts (Int'l)	active international	454.5
3.	Mellon Bond Associates	domestic – index	629.5
4.	Miller, Anderson & Sherrerd	active domestic	895.2
	Miller, Anderson & Sherrerd	active global fixed income	820.8
5.	J.P. Morgan Investment Management	active domestic fixed income	585.7
6.	Smith Graham & Co.	active domestic fixed income	27.9
	Specialty		
7.	CIGNA Investments	PA private placements	0.2
8.	John Hancock Mutual Life Insurance Company	private placements	172.7
9.	W. R. Huff Asset Management	high yield bonds	728.3
10.	Legg Mason Real Estate Advisors	residential and commercial mortgages	340.9
11.	Trust Company of the West Special Credits Fund III	special credits	1.8
12.	Fidelity Management Trust Company	commercial mortgage backed securities	83.6
13.	CoreStates PA Capital Fund	subordinated debt	0.0
	Total		$4,751.6

* *Includes securities and cash that the manager had available for investment.*

Numbers may not add due to rounding.

Summary: Cash

as of December 31, 1997

Cash is one of eight major asset classes SERS uses for investments of the Fund. SERS's investment plan calls for minimizing cash balances while meeting cash flow requirements.

Policy

Cash investments are employed by the Fund to provide for SERS's liquidity needs and to accumulate funds for future permanent investment. The asset class is to be managed on a total return basis, with the exception that temporary investments may alternatively be evaluated on a yield-to-maturity basis given their extremely short maturities.

In the cash asset class, SERS's long-term investment objectives are to achieve a risk-adjusted total return, net of fees, that exceeds the total return on 90-day U.S. Treasury Bills. SERS's *1997 Annual Five-Year Investment Plan* targeted an eventual allocation of 0% of assets to this asset class.

Market Value

Cash had a $20.1 million market value, or 0.1% of the total Fund's $21,307.7 million market value, on December 31, 1997.

Investment Advisors

SERS had a contract with one external investment advisor to manage a portfolio within the cash asset class. In accordance with SERS's *1997 Annual Five-Year Investment Plan* to eliminate the cash allocation, SERS rebalanced and consolidated cash assets managed by SERS's external cash investment advisor.

Investment Portfolios

Currently, SERS's cash portfolio is managed by the Pennsylvania State Treasury Department.

This asset class currently employs a money market short term investment strategy, managed by State Treasury; the portfolio also manages the uninvested cash balances held by other SERS investment advisors in other asset classes.

In the aggregate, Treasury managed $503.8 million on behalf of SERS and SERS's external investment advisors as of December 31, 1997.

Summary: Tactical Asset Allocation

as of December 31, 1997

Tactical asset allocation (TAA) is one of eight major asset classes SERS uses to diversify the investments of the Fund. It is SERS's practice to contract with external investment advisors to manage portfolios.

Currently, TAA contains one investment strategy – the Enhanced US 70/30 Tactical Asset Allocation Fund (Enhanced 70/30 TAA), which shifts assets among stocks, bonds, and cash. SERS contracts with an external investment advisor, Barclays Global Investors, to manage the portfolio.

Policy

SERS's *1997 Annual Five–Year Investment Plan* targeted an allocation of 5.0% of assets to TAA.

Market Value

SERS investment in Barclays' Enhanced 70/30 TAA had a $1,147.8 million market value, or 5.4% of SERS's total $21,307.7 million market value, on December 31, 1997.

Investment Advisors

SERS had a contract with one external investment advisor to manage a TAA portfolio as of December 31, 1997.

Investment Portfolios

SERS had one TAA portfolio managed by the one investment advisor.

Barclays' Enhanced 70/30 TAA is designed to offer an efficient, low cost means of seeking above–market returns from a portfolio diversified among the U.S. stock, fixed income, and cash markets.

SERS invests in three of Barclays' collective funds (Equity Index Fund, Long–Term Fixed Income Fund, and Short–Term Asset Allocation Cash Fund). Proprietary technology is used to establish and adjust the optimal asset mix among these funds. The mix will vary as economic and capital market conditions change.

Under equilibrium conditions, Enhanced 70/30 TAA will have 70% of assets invested in the Equity Index Fund, 30% in the Long–Term Fixed Income Fund, and 0% in the Cash Fund. As of December 31, 1997, the actual asset mix was 75% stock and 25% bonds.

Summary: Real Estate

as of December 31, 1997

Equity real estate is one of eight major asset classes SERS uses to diversify the investments of the Fund. SERS diversifies real estate investments, balances management styles, and contracts with external investment advisors to manage portfolios.

Policy

Equity real estate investments are generally long–term, illiquid investments that, due to their high correlation with inflation, provide an inflation hedge and, due to their low correlation with stocks and bonds, provide diversification within the total portfolio. It is expected that the long–term total return (income and appreciation) will fall between those of stocks and bonds.

The asset class is managed on a total return basis. SERS's long–term investment objective is to achieve a risk–adjusted total return, net of fees, that exceeds the total return of the NCREIF Index. SERS's *1997 Annual Five–Year Investment Plan* targeted an eventual allocation of 10% of assets to this class.

Investments are made through commingled fund investments, limited partnerships, and separate account portfolios where SERS owns the properties directly or with other co–investors. SERS's equity real estate portfolio guidelines provide for diversification by:

- Transaction structure;
- Property type;
- Geographic location; and
- Development phase.

Market Value

Real estate had an estimated $1,719.9 million market value, or approximately 8.1% of the total Fund's year–end market value. (This market value represents September 30, 1997, actual numbers adjusted for cash flows that occurred in the fourth quarter of 1997.)

Investment Advisors

SERS had contracts with 19 external investment advisors to manage real estate portfolios as of December 31, 1997.

Investment Portfolios

SERS had investments in 29 real estate portfolios managed by the 19 investment advisors.

As of September 30, 1997, the composition of the real estate portfolio was:

- 89% equity ownership, 11% equity–oriented mortgages;
- 37% pooled funds, 63% separate accounts;
- 28% office, 8% industrial, 26% retail, 17% residential, 11% hotel/motel, 10% other;
- 19% Pennsylvania, 20% East excl. Pa., 21% West, 24% South, 16% Midwest; and
- 26% of the market value of the separate accounts was invested in 16 investments located in Pennsylvania.

Real Estate Investment Advisor	SERS Initial Funding	Property Type	Transaction Structure	* Market Value *of Portfolio* as of 9/30/97 ($ in millions)
1. Allegis				
CERESA I	06/30/83	office, industrial	equity ownership	$ 2.5
PMSA	09/30/83	diversified	equity mortgages	45.8
RESA	06/30/84	diversified	equity ownership	39.6
Apartment Fund	12/31/86	residential	equity ownership	0.4
2. LaSalle Separate Account	10/1/93	diversified	equity ownership	98.8
Alex Brown Profile Fund	12/31/84	office, industrial retail, residential	equity ownership	1.3
3. Copley CIIF-II	08/08/88	industrial, other	equity ownership	12.4
4. Corporate Property Investors	12/08/83	office, industrial retail	equity ownership	124.6
5. Forest Investment Assoc.	10/30/92	timber	equity ownership	79.4
6. Heitman Capital Mgmt.				
Separate account	12/28/87	office, industrial retail	equity ownership	431.8
California Land Venture	12/07/89	land	equity ownership	1.3
JMB Group Trust III	12/31/84	office, retail	equity ownership	38.6
7. John Hancock Apartment Fund	09/30/86	residential	equity ownership	8.2
8. Metric				
MIAF	09/05/89	residential	equity ownership	15.1
MIAF II	12/07/92	residential	equity ownership	20.1
9. PSI III	08/16/88	industrial	equity ownership	20.7
10. Sentinel Corp	07/31/84	office, industrial retail, residential	equity ownership	44.3
11. Lowe Enterprises	10/1/93	diversified	equity ownership	172.2
12. Legg Mason Real Estate Advisers	10/1/93	PA diversified	equity ownership	131.8
CRA Securities	01/31/96	REITs	public securities	142.6
13. Whitehall V & VI	04/20/94	opportunistic	equity and debt	43.2
Whitehall V-S & VI-S	12/11/95	opportunistic	equity and debt	7.0
Whitehall VII & VIII	05/28/96	opportunistic	equity and debt	18.3
14. TCW Fund VI	04/20/94	opportunistic	equity and debt	60.7
15. OCM Opportunity Fund	05/09/96	opportunistic	equity and debt	34.2
16. Oxford Development	01/09/97	industrial	equity ownership	14.0
17. Blackstone - BREP II	02/26/97	opportunistic	equity and debt	21.4
18. Starwood - SOFI IV	03/24/97	opportunistic	equity and debt	11.1
19. Westbrook - WREF II	06/16/97	opportunistic	equity and debt	0.0
September 30, 1997, Total				$1,641.3
Fourth Quarter 1997 Net Cash Flow Adjustments				78.6
December 31, 1997, Total				$1,719.9

* *Numbers may not add due to rounding.*

Summary: Private Equity

as of December 31, 1997

Private equity combines two of the eight major asset classes SERS uses to diversify the investments of the Fund. The two classes are venture capital and alternative investments. In these areas, SERS primarily invests in limited partnerships. The partnerships are established by individual management groups selected by SERS for the purpose of investing in and managing private equity and unlisted–subordinated debt positions on behalf of SERS and other limited partners.

Venture Capital

This is financing of young, rapidly growing companies that lack access to public equity or debt–oriented institutional funding. Venture capital strategies are typically classified as follows.

Seed Stage: This form of venture capital funds companies that are still in the conceptual phase; i.e., a product and market are identified, but the company itself has yet to be formed. The seed investment is generally less than $1 million and is used to finance development of the concept or business plan.

Early Stage: This investment phase emphasizes companies that have been formed; however, revenues have not yet been realized. The product has been developed and may have been shipped to a friendly user for testing. Management positions have been filled and the team is in place.

Late Stage: At this stage, venture capitalists fund companies with proven revenues that are in the process of expanding. Typically, these companies, if substantially profitable, are nearing a strategic sale to another company or an initial public offering. In other cases, a late stage, or "bridge," financing may be used to supply needed capital for operations or expansion.

Alternative Investments

This consists of all other forms of private equity that exclude conventional venture capital investing as previously described. Primarily, these partnerships invest in the private equity and subordinated debt of established companies. Alternative investments, however, can also include other forms of non–traditional investing such as investments in oil and gas interests and hedge funds. Distinct strategies currently used by SERS are as follows:

Leveraged Buyout ("LBO"): This financing enables companies to be acquired through the use of borrowed funds. Typically, the assets of target companies serve as collateral for loans originated in the transaction. The loans are subsequently repaid from the acquired company's cash flows. SERS invests as an equity partner in LBO partnerships. As such, SERS participates in potential profits resulting when LBO exits occur, typically reaping higher rewards than company debt holders.

Distressed Debt: This investing involves the identification of opportunities in the deleveraging of debt–laden companies. Investments are usually made in successful companies, which, over time, have accumulated heavy debt loads. Distressed debt investors assist companies in reducing debt and even avoiding bankruptcy by providing patient capital. The new capital carries renewed terms which usually include an equity stake in the restructured firm.

Secondary Partnerships: These acquire interests in established buyout and private equity funds. Secondary investing can often be lucrative in two ways: 1) the partnerships are purchased at significant discounts to net asset value, and 2) the purchase frequently occurs as the acquired partnerships begin to realize profits, thereby reducing risk in the asset class.

Policy

SERS's long-term investment objective for private equity is to achieve a risk–adjusted total return, net of fees, that exceeds market returns for similar types of private equity investments, or benchmark return data furnished by SERS's private equity consultant. SERS's *1997 Annual Five–Year Investment Plan* states an annualized expected total return of 14.0% and targets an eventual allocation of 8.0% to private equity, which comprises an allocation of 2.0% to venture capital and 6.0% to alternative investments. The target threshold for venture capital is designated by statutory guidelines as follows.

Act 95, Section 4, became effective on June 29, 1984, specifying that SERS may invest up to 1.0% of the Fund's assets in venture capital by acquiring equity or debt and equity interests in a business which is expected to grow substantially in the future. Act 1991–23 became effective in 1991, and specified that SERS may invest up to 2.0% of the Fund in venture capital. Furthermore, Act 1994–29 became effective in 1994, which enables SERS to invest according to "prudent person" standards, and further specifies that an investment in venture capital by SERS may be made only if the investment is reasonably likely to enhance the general welfare of the Commonwealth and its citizens.

Market Value

The asset class total market value stood at $738.9 million, representing 3.4% of the Fund, as of December 31, 1997. Sub–asset class market values and fund percentages were as follows:

	Total Commitments ($ in millions)	Market Value ($ in millions)	Percent Allocation to Total Fund
Venture Capital	$625	$328.1	1.5%
Alternative Investments	$1,241	$410.8	1.9%
Total Private Equity	$1,866	$738.9	3.4%

Number of Limited Partnerships

As of December 31, 1997, SERS had commitments to a total of 73 private equity limited partnerships, including 34 commitments in venture capital and 39 in alternative investments. As of September 30, 1997, SERS had paid–in capital as a limited partner to all but four of these partnerships, with paid–in capital representing funds that have been drawn down by the general partners and are readily available for investment.

Venture Capital

This program includes commitments to 34 limited partnerships, a significant number of which are committed to include Pennsylvania–based companies as part of their venture investment focus. These partnerships, as part of their contractual agreement with SERS, will, on a best efforts basis, attempt to make venture capital investments in companies either headquartered in Pennsylvania or that provide employment for Pennsylvania citizens. Currently, venture capital investments are made in 37 Pennsylvania companies and 26 non–Pennsylvania companies that employ in–state residents. According to a study conducted by Coopers & Lybrand L.L.P., during 1996, Pennsylvania ranked fourth highest among the states in the number of firms being financed with venture capital money. In 1997, Pennsylvania ranked third in the nation in the number of venture transactions financed, and tenth in dollars applied to venture financing (with $339.5 million invested), a 10.6% increase over 1996.

The venture program's financing stage focus varies among the 34 partnerships. The venture partnerships focus on specific phases in company life cycles; SERS's investments are thereby grouped to reflect this exposure and are labeled as follows: seed stage, early stage, and later stage financing.

A major component of the program is to diversify company investments across industries. As of September 30, 1997, the SERS venture capital program was invested across industry categories as follows:

28%	computer related industries	22%	healthcare related industries	8%	biotechnology
10%	telecommunications	2%	financial services	7%	consumer products
4%	industrial products	4%	electronic products	1%	restaurants
2%	retailing	2%	media services	10%	others

Venture Capital Committed, Drawn and Distributed

as of December 31, 1997

In the chart below, the Capital Committed column represents the capital amount officially allocated to each partnership. Capital Drawn is that portion of SERS's capital commitments that was drawn by SERS's venture capitalist for investment in underlying companies. The Distributions column lists profits and original capital returned to SERS from each partnership.

Limited Partnership	Financing Stage Focus	SERS's Initial Funding	Capital Committed ($ in millions)	Capital Drawn ($ in millions)	Distributions ($ in millions)
1. Advent VII	Diversified	7/30/93	$ 25.0	$ 25.0	$ 26.5
2. Advent VIII	Diversified	2/1/97	30.0	4.8	0.0
3. APA/Fostin	Diversified	9/30/87	20.0	20.0	57.1
4. P/A Fund I (APA/Fostin II)	Diversified	6/2/93	30.0	28.3	11.8
5. P/A Fund III	Diversified	4/1/97	100.0	7.5	0.0
6. Bachow III	Diversified	11/9/94	25.0	17.8	4.3
7. CEO Ventures II	Diversified	7/14/89	8.0	7.5	2.3
8. Edison Ventures III	Diversified	3/1/94	25.0	22.5	1.9
9. Fairview Capital	Minority	9/28/94	10.0	4.0	0.3
10. Fairview Capital II	Minority	*	10.0	0.0	0.0
11. Fostin Capital	Diversified	11/25/85	10.0	10.0	9.4
12. Fostin Capital II	Diversified	10/5/89	8.0	7.5	2.2
13. Grotech PA III	Diversified	6/29/90	3.0	3.0	1.1
14. Grotech IV	Diversified	11/1/93	25.0	22.8	7.9
15. Healthcare Ventures III	Diversified	7/9/92	15.0	15.0	12.6
16. Healthcare Ventures V	Diversified	10/17/97	25.0	5.0	0.0
17. Keystone IV	Middle/Later	7/21/93	15.0	14.4	6.6
18. Keystone V	Middle/Later	12/29/97	25.0	1.8	0.0
19. New Enterprise Assoc. VI	Early/Later	3/2/94	25.0	26.3	6.0
20. New Enterprise Assoc. VII	Early/Later	4/1/97	8.9	5.9	0.0
21. NEPA Ventures I	Seed/Early	8/29/85	2.0	2.0	5.9
22. NEPA Ventures II	Seed/Early	7/24/92	8.0	6.8	0.2
23. NEPA Ventures III (MidAtlantic)	Seed/Early	4/1/97	20.0	4.8	0.0
24. Point Ventures	Diversified	10/2/90	1.0	1.0	0.8
25. Pittsburgh Seed	Seed	1/13/87	2.0	2.0	0.6
26. Polaris Ventures	Early Stage	6/4/96	15.0	7.8	0.0
27. PNC Ventures	Diversified	11/25/85	5.0	5.0	10.9
28. Sprout Capital VII	Diversified	2/24/95	18.0	12.6	0.0
29. Summit Ventures IV	Later Stage	6/27/95	25.0	11.3	4.3
30. Summit Ventures V	Later Stage	*	40.0	0.0	0.0
31. TDH II	Diversified	11/25/85	9.0	8.5	16.0
32. Technology Leaders III	Diversified	1/3/97	15.0	4.5	0.0
33. Weston Presidio II	Diversified	11/27/95	20.0	8.8	1.4
34. Zero Stage II	Seed	4/30/87	2.0	2.0	0.1
Total			$624.9	$326.2	$190.2

* *No contract to date*

Numbers may not add due to rounding.

Alternative Investments

This program has commitments to 21 buyout-oriented partnerships, which are well diversified by size of investment and geographic focus. Only "friendly" acquisitions are pursued. All deals are non–hostile and privately negotiated. Most transactions are negotiated (i.e., "non-auctioned") and are completed with present management in place. SERS's seven non–U.S. private equity investments are comprised of companies based in the United Kingdom (UK) and Europe. The partnerships focus on the UK, France, Germany, and German–speaking countries. All seven funds plan to take advantage of changes occurring within Europe, including the formation of the European Economic Community, the reunification of Germany, and the dissolution of the former Soviet Union. The European funds are legally termed as venture capital; nevertheless, the funds employ a mix of late stage venture capital and buyout strategies. The misleading nomenclature here reflects a historical European practice of labeling most private equity as venture capital.

The international fund–of–funds is comprised of partnerships specializing in late stage venture and buy–out investing. The partnerships are located throughout the world, with a geographic emphasis on developed countries. This fund offers SERS immediate and diversified exposure to limited partnerships internationally and provides guidance for SERS in forming its own core investment portfolio of non–U.S. private equity partnerships.

SERS has ownership interest in three partnerships specializing in distressed debt instruments. One of the partnerships deals in debt obligations of financially troubled companies; the distressed debt is ultimately converted into equity in order to produce an equity oriented return. The partnership is national in focus. Similarly, the other investments, also in distressed debt, anticipate gains in the appreciation of the debt instrument itself and do not rely on converting the debt into an equity position. SERS also has an interest in two partnerships that invest in secondary purchases. The partnerships have a national focus and specialize in secondary purchases of established buyout and venture capital holdings. The benefits of secondary purchases are two-fold: 1) the partnerships are normally acquired from motivated sellers at substantial discounts to net asset value; and 2) secondaries often provide early distribution of profits compared to initial investments made in new funds.

Alternative Investments Committed, Drawn and Distributed

at December 31, 1997

The Capital Committed column below represents total dollars allocated from SERS to each limited partnership. Capital Drawn is the portion of SERS capital commitments, which was drawn by the General Partner to be placed with underlying portfolio companies. The Distributions column shows the value of original capital and profits returned to SERS.

Limited Partnership	Financing Stage Focus	SERS's Initial Funding	Capital Committed ($ in millions)	Capital Drawn ($ in millions)	Distributions ($ in millions)
1. APA Capital Risque III	France	11/29/90	$ 5.0	$ 5.6	$ 3.7
2. APA German Ventures	Germany	1/30/91	5.0	5.2	2.6
3. APA German Ventures II	Germany	7/15/97	6.0	4.4	0.0
4. APA UK Ventures VI	U.K.	12/9/97	9.0	1.0	0.0
5. ABRY Broadcast Partners III	Telecom. Buyouts	4/1/97	25.0	3.6	0.0
6. BIII (DDJ Capital Mgt.)	Distressed Debt	8/1/97	35.0	16.9	0.0
7. Blackstone Capital II	Global Buyouts	8/26/94	40.0	42.4	27.4
8. Blackstone Capital III	Global Buyouts	11/3/97	75.0	2.5	0.0
9. Brentwood Buyout Fund	National Buyouts	11/21/88	10.0	12.5	9.6
10. Charterhouse Equity II	National Buyouts	3/30/94	40.0	38.0	14.7
11. Charterhouse Equity III	National Buyouts	11/19/97	50.0	2.6	0.0
12. Clayton, Dubilier & Rice V	Global Buyout	5/3/95	50.0	16.0	0.0
13. Code, Hennessy & Simmons I	Midwest Buyouts	9/28/89	10.0	9.7	14.8
14. Code, Hennessy & Simmons II	Midwest Buyouts	7/12/94	20.0	15.6	11.9
15. Code, Hennessy & Simmons III	Midwest Buyouts	8/1/97	50.0	4.4	3.2
16. DLJ Merchant Banking Fund II	Global Buyouts	5/22/97	75.0	17.2	0.6
17. Frontenac VII	Midwest	8/1/97	40.0	8.0	0.0
18. GTC&R V	National Buyouts	4/25/97	11.0	4.4	0.0
19. Hancock Int'l Equity Partners II	Int'l Fund of Funds	4/1/97	25.0	2.2	0.5
20. Hellman & Friedman II	Global Situations	1/7/92	25.0	25.2	25.6
21. Hellman & Friedman III	Global Situations	6/14/95	50.0	26.6	15.4
22. Kelso Investment V	National Buyouts	1/26/94	40.0	36.7	10.1
23. Landmark Equity Partners IV	Secondaries	2/28/95	31.0	8.1	8.4
24. Landmark Equity Partners V	Secondaries	1/27/96	24.0	11.1	3.7
25. Media Communications III	Telecom. Buyouts	6/2/97	25.0	7.0	0.0
26. Madison Dearborn I	National Buyouts	2/23/93	15.0	14.4	8.1
27. Madison Dearborn II	National Buyouts	1/3/97	40.0	9.6	0.0
28. Murphy & Fauver	National Buyouts	10/11/88	5.0	5.2	5.4
29. OCM Opportunities Fund	Distressed Debt	1/12/96	24.0	24.0	0.0
30. OCM Opportunities Fund II	Distressed Debt	*	40.0	0.0	0.0
31. OCM Principal Opportunities	Private Equity	11/12/96	25.0	8.8	0.0
32. RR&Z Private Equity Fund	PA Buyouts	11/7/96	20.0	0.6	0.0
33. Schroder Ventures UK III	UK	8/29/89	10.0	8.9	15.8
34. Schroder Ventures UK IV	UK	4/2/96	15.0	5.0	0.0
35. Schroder European Ventures	Pan-European	7/1/97	36.0	6.7	0.0
36. Thomas H. Lee Equity Fund	National Buyouts	*	100.0	0.0	0.0
37. TPG Partners II	National Situations	5/2/97	75.0	15.6	0.0
38. TCW Special Credits V	National Situations	8/25/94	35.0	35.0	7.0
39. Vestar Capital Partners	National Situations	5/7/97	25.0	6.2	0.0
Total			$1,241.0	$466.9	$188.5

** No contract to date.*

Numbers may not add due to rounding.

[1] Footnote: Public Fund market values are as of December 31, 1997. Market values for real estate and private equity (venture capital and alternative investments) are based on September 30, 1997 valuations adjusted for any cash flows during the fourth quarter of 1997.





PENNSYLVANIA INVESTMENTS

Section 2



Summary of Pennsylvania Investments

as of December 31, 1997

Members of the State Employes' Retirement Board, employes of SERS and agents of the Board stand in a fiduciary relationship to the members of the system regarding the investments and disbursements of the Fund. Subject to restrictions on investments contained in the Retirement Code and the Fiscal Code, the Board has exclusive control and management of the Fund and full power to invest the assets of the Fund. The Board adopted a formal Statement of Investment Policy in 1979, which has been revised to reflect and incorporate subsequent legislative changes governing investments. Where investment characteristics including yield, risk, and liquidity are equivalent, the Board's policy favors investments that have a positive impact on the economy of Pennsylvania.

Market Value of Pennsylvania Investments

SERS's assets had an unaudited market value in Pennsylvania investments of approximately $1,061.5 million on December 31, 1997.

SERS Pennsylvania Investments by Asset Class ($ in millions) [a]

Asset Class	Specially Designed Portfolios Pa. Market Value	Total Pa. Market Value
U.S. Stock	$170.1	$505.0
Fixed Income	85.9	134.4
Tactical Asset Allocation	–	33.1
Real Estate	277.4	302.9
Venture Capital	27.5	48.1
Alternative Investments	0.4	38.0
Total	$561.3	$1,061.5

SERS's investment portfolios have always had substantial investments in Pennsylvania firms, as some large national firms are headquartered in the Pittsburgh, Philadelphia, and Harrisburg areas, including Bell Atlantic, RiteAid, Sun, Rohm & Haas, and H.J. Heinz. SERS also has invested in portfolios designed to emphasize investments in Pennsylvania. As of December 31, 1997, SERS had $1,061.5 million (about 5.0% of the total Fund) invested in Pennsylvania, of which $561.3 million was in portfolios specially designed for in–state investments.

Stocks

SERS has two Pennsylvania stock portfolios that increase exposure to in–state corporations. The Pennsylvania stock universe is comprised of 572 publicly–traded corporations that: 1) name their headquarters as Pennsylvania and have Pennsylvania employees or operations; or 2) have Pennsylvania–based employment exceeding 25% of total corporate employment. Emerald Advisers, Inc., of Lancaster and Mellon Equity Associates of Pittsburgh actively manage portfolios from SERS's Pennsylvania stock universe. The market value of the Pennsylvania stock portfolios was $170.1 million as of December 31, 1997. SERS had an additional $334.9 million invested in the stock of Pennsylvania companies as of December 31, 1997, with these stocks held in SERS's index funds and actively managed portfolios.

[a] *Pennsylvania investments for public market investments are valued as of December 31, 1997. Pennsylvania investments in real estate are valued as of September 30, 1997. Private equity investments for Pennsylvania companies are valued semi–annually, and reported as of June 30, 1997.*

Fixed Income

As of December 31, 1997, SERS had $0.2 million invested in loans of the Pennsylvania Private Placement Separate Account, which was designed by the Pennsylvania MILRITE Council and is managed by CIGNA. This account was created to provide long–term, fixed rate loans to established Pennsylvania firms that do not have access to the public bond markets

SERS had $85.7 million invested in Pennsylvania mortgages ($85.4 million in conventional commercial and $0.3 million in residential properties) as of December 31, 1997. The residential segment of this portfolio is comprised of competitive rate mortgages that are distributed solely throughout Pennsylvania, in accordance with SERS policy to originate 100% of all residential mortgages within the Commonwealth.

The commercial segment listed above is comprised of competitive rate mortgages on various industrial, retail, apartment and office complexes within Pennsylvania. Legg Mason, SERS's mortgage advisor, has committed on a best efforts basis under its fiduciary responsibility to invest between 15% and 30% of SERS's commercial mortgage portfolio in Pennsylvania and 100% of all residential mortgages in Pennsylvania. It is conservatively estimated that as of December 31, 1997, the various commercial projects financed within the Commonwealth by SERS under the commercial mortgage program directly employed over 5,000 workers. This figure does not take into account those who are employed in the property management and maintenance areas of these projects, nor does it consider the favorable "ripple effect" that such jobs may have on the local economy.

SERS also had approximately $48.5 million invested as of December 31, 1997, in corporate securities issued by Pennsylvania–based companies; these securities are held in SERS's various externally managed bond portfolios.

Cash

SERS is one of the largest investors in the Short Term Investment Pool managed by the Pennsylvania State Treasury Department. The Treasury Investment Pool had significant holdings of 1) certificates of deposit issued by Pennsylvania–based financial institutions; 2) short–term notes and commercial paper issued by Pennsylvania–based companies; 3) notes and obligations of selected Pennsylvania state agencies; and 4) FNMA mortgage–backed securities backed by loans issued under the Homestart program. The Homestart program is designed to encourage home ownership within the Commonwealth by making mortgages available to lower–, moderate–, and middle–income Pennsylvania households.

Real Estate

In 1987, SERS began investing directly in the Pennsylvania commercial real estate market and subsequently established two separate account real estate portfolios managed by Heitman Capital Management and Legg Mason Real Estate Advisers, which have a Pennsylvania focus. The Heitman separate account has a requirement to invest on a best efforts basis 50% of its initial allocation within the Commonwealth, while the Legg Mason account is focused exclusively on investing within the state.

As of September 30, 1997, the SERS real estate portfolio contained 40 Pennsylvania properties totaling over 8,105,000 square feet of office, retail, hotel, apartment, and warehouse space. The gross market value of these investments totaled $699.9 million, of which SERS's ownership share was $302.9 million.

Private Equity

The private equity program is comprised of investments in venture capital and alternative investments. Both sub–asset classes, particularly venture capital (given its legislative chartered mandate), target partnerships that demonstrate an ability to invest in Pennsylvania–based companies or in companies that generate jobs for Pennsylvania citizens.

The private equity program also seeks to attract national funds into the Pennsylvania small business community. Many of SERS's fund managers function as lead investors (e.g., the sponsors independently identify opportunities instead of relying on syndicated offerings) and, in turn, provide Pennsylvania with capital from numerous out–of–state investors. As of December 31, 1997, SERS's venture capital and alternative investment partnerships together had attracted over $1.1 billion of out–of–state funds in order to finance portfolio companies based in Pennsylvania. Large, nationally–oriented fund sponsors bring sophisticated managerial expertise to Pennsylvania companies, further leveraging SERS's invested capital.

Private equity partnerships funded by SERS were managing active investments in 55 Pennsylvania companies as of December 31, 1997. In addition to these companies, SERS also tracks the in–state dealings of other non–Pennsylvania–domiciled portfolio companies. The business activities of both groups combined is considerable; these companies employ approximately 5,686 Pennsylvanians and had a 1997 payroll of approximately $183.7 million.

Venture Capital

SERS, in conjunction with the Pennsylvania Public School Employes' Retirement System (PSERS), created the APA/Fostin Pennsylvania Venture Capital Fund in 1987 with a commitment of $20 million from each fund. The partnership of Alan Patricof Associates ("APA")/Adams Capital manages this venture capital fund from offices in Philadelphia and Pittsburgh. During 1992, SERS and PSERS committed $30 million each to create the P/A Fund (originally known as the APA/Fostin Pennsylvania Venture Capital Fund II). In addition, in December 1996, SERS committed $100 million to P/A Fund III. In keeping with established precedent, the P/A Funds will continue to focus on Pennsylvania venture capital investing.

SERS has also been active in seed and early stage Pennsylvania–based investing. During the past 11 years, SERS's investment in the NEPA Venture Fund has funded 29 Pennsylvania–based startup companies. Most of these companies have a technology orientation. SERS's commitment to NEPA Venture Fund II facilitated coverage of the Pittsburgh area as well as Eastern Pennsylvania. More recently, in April 1997, SERS funded the Mid-Atlantic Venture Fund, another partnership organized by the NEPA group, which will focus on early stage companies across Pennsylvania and surrounding regions.

Alternative Investments

In 1988, SERS invested $10 million with RR&Z Pennsylvania Fund #1, a Pittsburgh–based buyout group. RR&Z invests in non–hostile, "friendly," privately negotiated, non–auction deals designed to maintain present management. The LBO fund focuses on small–to–medium capitalization companies (between $5 million and $100 million) within a 600 mile radius of Western Pennsylvania. Since inception, RR&Z Fund #1 has returned over $19 million to SERS and has successfully exited four of its five investments. In 1996, SERS committed $20 million to the RR&Z Private Equity Fund, which will be a continuation of the strategy developed in Pennsylvania Fund #1.

SERS's search for fund managers within alternative investments includes a focus on Pennsylvania–based companies. SERS's commitments to this asset class include Blackstone Capital, Charterhouse Equity Partners, and Kelso Investment Associates, which have made Pennsylvania a part of their focus by investing in Pennsylvania–based companies.





INVESTMENT *and* PROGRAM TRENDS

Section 3



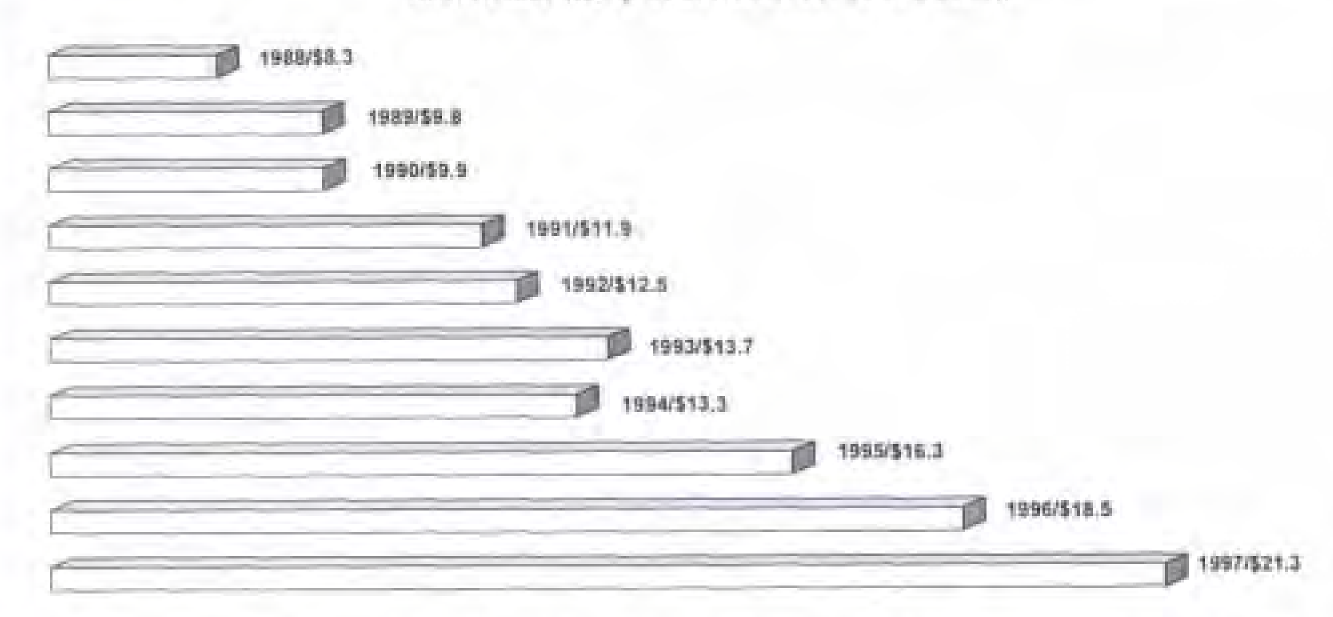
Prudent Person Standard

The SERS Board of Trustees' investment authority is governed by the "prudent person" standard as set forth in Title 71, Pennsylvania Consolidated Statutes, Section 5931(a). Enactment of the "prudent person" standard in Act 1994–29 and a subsequent asset/liability study completed by RogersCasey and the SERS investment staff are the foundation of SERS's *Annual Five–Year Investment Plans*. With prudent person investment authority, SERS is able to pursue a broader array of investment opportunities that enhance the ability to achieve competitive rates of return while maintaining risk at acceptable levels. The asset/liability study demonstrated that the prudent application of this expanded authority should result in a more efficient portfolio that better serves the needs of SERS.

Investment Highlights

The unaudited market value* of SERS investments, including accruals, was $21,307.7 million as of December 31, 1997. This represents an increase of $2,787.4 million from the $18,520.3 million market value as of December 31, 1996. Based on the market value of assets as of September 30, 1997, the SERS Fund ranks 38th among public and corporate pension funds.**

SERS Fund Size by Year 1988-1997 ($ in billions)



* *The investment portion of this report is based on unaudited, end-of-1997 figures. Section 4 of the report provides audited financial statements that were completed in April 1998. Differences between the unaudited figures and the audited financial statements generally are due to settlement date accounting in the unaudited figures and the reporting of the security lending collateral pool in the audited financial statements.* ** *Source:* Pensions & Investments *magazine, January 26, 1998*

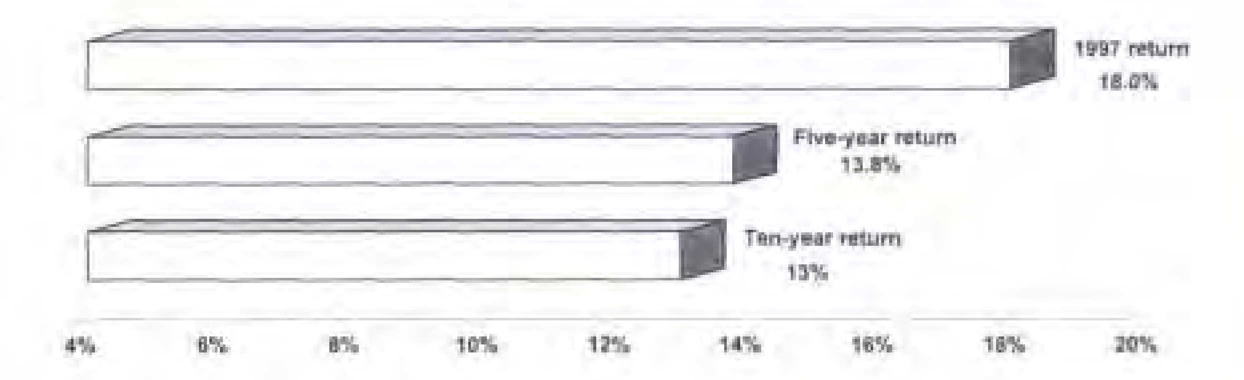
Investment Related Statistics

1981 through 1997

Year End	Fund Assets	# of Investment Advisors	# of Portfolios	# of Consultants	Annual Total Fund Rate of Return (*net of fees*)
1981	$2,817,000,000	5	6	3	0.9%
1982	$3,730,000,000	6	7	4	27.8%
1983	$4,396,000,000	14	17	4	13.0%
1984	$4,922,000,000	22	24	4	9.4%
1985	$6,157,000,000	23	26	3	23.1%
1986	$7,120,000,000	30	34	3	15.2%
1987	$7,367,000,000	37	42	3	3.3%
1988	$8,312,000,000	41	49	3	12.8%
1989	$9,785,000,000	47	59	4	17.8%
1990	$9,886,000,000	53	65	4	1.0%
1991	$11,940,000,000	56	68	4	22.6%
1992	$12,453,000,000	66	79	4	7.4%
1993	$13,701,000,000	61	80	4	13.2%
1994	$13,330,000,000	78	100	4	- 1.1%
1995	$16,343,000,000	81	103	4	25.3%
1996	$18,492,000,000	96	126	4	15.9%
1997	$21,312,000,000	112	154	4	18.0%

For the year ended December 31, 1997, SERS realized a +18.0% total investment rate of return after fees. As a long-term investor with long-term liabilities, the fund is most concerned with long-term performance. SERS's annualized five-year investment rate of return for the period ending December 31, 1997, was +13.8% after fees, and the annualized ten-year investment rate of return was +13.0% after fees.

SERS Fund Returns in 1997 and Over the Last Five- and Ten-year Periods



Investment Performance by Asset Class

By Calendar Year through December 31, 1997* (net of fees and vs. applicable benchmarks)

Asset Class	One-year Total Return	Three-year Total Return	Five-year Total Return	Ten-year Total Return
U.S. Stock	29.0%	29.2%	18.9%	17.4%
Benchmark: Wilshire 5000 Index	*31.3%*	*29.5%*	*19.2%*	*17.6%*
International Stock	5.8%	8.7%	11.2%	NA
*Benchmark: MSCI World ex US Index through 12/93, SERS Custom International Stock Index (26% hedged) thereafter *****	*-0.1%*	*5.5%*	*10.2%*	*NA*
Fixed Income	9.9%	12.3%	9.3%	10.1%
Benchmark: SERS Fixed Income Custom Index	*9.4%*	*11.3%*	*8.4%*	*9.3%*
Cash	5.8%	6.1%	5.8%	7.4%
Benchmark: 90 day U.S. T-bills	*5.3%*	*5.5%*	*4.7%*	*5.7%*
Tactical Asset Allocation	23.9%	24.6%	17.5%	NA
Benchmark: 60% stocks/40% bonds through 6/93, 70% stocks/30% bonds thereafter	*28.1%*	*25.2%*	*16.9%*	*NA*
Real Estate ***	11.6%	10.4%	7.6%	4.1%
*Benchmark: NCREIF Index ****	*11.1%*	*9.6%*	*7.2%*	*3.9%*
Alternative Investments ***	14.0%	20.2%	14.6%	8.9%
Venture Capital ***	27.2%	25.8%	19.0%	12.3%
Total Fund	18.0%	19.5%	13.8%	13.0%

* *Returns for periods longer than one year are annualized.*

** *The SERS Custom International Stock Index benchmark (26% hedged) was unhedged prior to May 1, 1996.*

*** *Real Estate, NCREIF Index, Alternative Investments, and Venture Capital one-year returns as of September 30, 1997, with the SERS asset class valuations adjusted for any cash flows during the fourth quarter of 1997.*

Asset Allocation Trend

1998 through 2002

SERS implements the Fund's current investment plan over a period of five years. The Fund's asset allocation strategy evolves over this timeframe until the long–term targets for each asset category are achieved by the end of the five–year period. The evolution of the asset allocation strategy to year 2002 is reflected in the table below.

Actual 1997		Target 1998	Target 1999	Target 2000	Target 2001	Target 2002
60.7%	Stock	60.0%	57.7%	56.7%	55.4%	54.0%
22.3%	Fixed Income	23.0%	23.0%	23.0%	23.0%	23.0%
5.4%	Tactical Asset Allocation [1]	5.0%	5.0%	5.0%	5.0%	5.0%
8.1%	Real Estate	8.5%	10.0%	10.0%	10.0%	10.0%
3.4%	Private Equity	3.5%	4.3%	5.3%	6.6%	8.0%
0.1%	Cash	0.0%	0.0%	0.0%	0.0%	0.0%
100.0%		100.0%	100.0%	100.0%	100.0%	100.0%

[1] *TAA normal position is 70% stocks and 30% bonds*

Commissions Paid by

Separate Account Stock Advisors to Clearing Brokers

1997–1996 Comparison

	1997	*1996*
Domestic Commissions	$6,090,721.61	$5,132,183.66
International Commissions	$13,835,514.46	$10,719,294.57
Total Commissions	$19,926,236.07	$15,851,478.23

1997 Breakdown

BROKER	COMMISSIONS
MERRILL LYNCH PIERCE FENNER + SMITH	$1,860,395.72
GOLDMAN SACHS	943,852.10
MORGAN STANLEY AND CO., INC.	896,745.72
WARBURG S.G. + COMPANY, INC.	669,081.55
DEUTSCHE MORGAN GRENFELL	607,915.43
CS FIRST BOSTON CORPORATION	569,079.89
CREDIT LYONNAIS SECS	563,733.15
SALOMON BROTHERS, INC.	547,672.23
UBS SECURITIES, INC.	496,590.15
INSTINET	492,803.45
NIKKO SECURITIES CO. INT'L	449,821.75
SBC WARBURG, INC.	437,413.39
JAMES CAPEL + CO.	405,926.25
LYNCH JONES AND RYAN	364,265.02
INVESTMENT TECHNOLOGY GROUP, INC.	343,438.72
BEAR STEARNS SECURITIES CORP	325,183.01
WI CARR	315,941.58
MORGAN J.P. SECURITIES INC.	315,925.35
KLEINWORT BENSON, INC.	290,164.86
SMITH BARNEY, INC.	261,703.49
JARDINE FLEMING SECURITIES LTD.	245,774.56
ALPHA MANAGEMENT, INC.	245,520.54
LEHMAN BROS., INC.	241,989.98
ABN AMRO HOARE GOVETTE	218,588.90
BZW SECURITIES LTD.	212,589.62
ROBERT FLEMING SECURITIES LIMITED	210,091.89
CAZENOVE SECURITIES LTD	209,153.12
NATWEST SECURITIES CORP.	173,893.56
DONALDSON LUFKIN + JENRETTE SECS	168,389.45
ING BARING SECURITIES	164,602.55
EXANE	164,286.90
HSBC JAMES CAPEL LIMITED	162,653.51
SOCGENT CROSBY SECURITIES	160,042.74
SCHRODER SECURITIES LTD	160,000.44
DAIWA SECURITIES CO.	159,143.70
CANTOR FITZGERALD + CO., INC.	136,835.36
LEWCO SECURITIES	134,829.79
WEEDEN + CO.	112,289.20
HG ASIA LTD	106,933.96
NEUBERGER + BERMAN	105,845.69
COWEN + CO.	103,132.00
BARING SECURITIES	$100,221.19
EWING CAP., INC. BROADCORT CAP. CLEARING	98,860.50
ROCHDALE SECURITIES CORP	97,317.95
CARNEGIE, INC.	93,346.23
PAINE WEBBER INCORPORATED	93,078.10
JEFFERIES + CO.	92,842.90
ENSKILDA SECURITIES	91,677.55
FOX PITT KELTON, INC.	88,997.36
NOMURA SECURITIES CO. LTD	87,595.44
PEREGRINE BROKERAGE LTD.	82,829.34
PRUDENTIAL SECURITIES, INC.	82,772.98
MONTGOMERY SECURITIES	82,353.20
WILSHIRE ASSOCIATES	80,333.75
MORGAN GRENFELL	79,762.31
OPPENHEIMER + CO., INC.	76,053.75
BZW ASIA LTD.	72,899.31
CAPITAL INSTITUTIONAL	70,936.00
KAY HIAN SECURITIES	67,762.30
BERNSTEIN SANFORD C + CO., INC.	61,302.41
ALFRED BERG	61,170.41
OKASAN INTERNATIONAL EUROPE	59,121.81
FSI SECURITIES COMPANY	55,092.08
BROWN (ALEX) + SONS, INC.	53,614.80
FIRST BOSTON CORP	52,816.51
JB WERE + SON LTD	51,468.02
CROSBY SECURITIES COMPANY	51,398.52
GK GOH STOCKBROKERS	49,100.64
PCS SECURITIES, INC.	47,343.60
BAIN SECURITIES, INC.	47,085.09
STANDARD + POOR'S SECURITIES	46,677.00
KIM ENG SECURITIES	46,209.92
COUNTY NAT WEST	45,985.32
DEUTSCH BANK	45,316.89
BANK JULIUS BAER	44,454.85
HOARE GOVETT SECURITIES LIMITED	43,386.26
JAVELIN SECURITIES	42,319.00
ASESORES	40,936.80
ASIA EQUITY LIMITED	40,838.83
QUAKER SECURITIES, INC.	40,747.08
C.J.LAWRENCE/DEUTSCHE BANK SECURITIES	40,528.92

1997 Breakdown (Continued)

BROKER	COMMISSIONS
JONES + ASSOCIATES	$39,299.50
K N KENANGA CDS	38,518.22
TIEDEMANN SECURITIES LIMITED	36,781.22
CREDIT SWISS	36,586.42
EUROPE COMPANY	35,477.11
WESTMINSTER RESEARCH ACCOCIATION	35,078.00
BANCO SANTANDER	34,515.27
CHEVREUX DE VIRIEU	33,380.41
FIDELITY CAPITAL MARKETS	33,372.86
ROBERTSON STEPHENS AND COMPANY	33,169.00
WACO SECURITIES CO.	32,829.13
CI NORDIC	32,205.12
WEISS PECK AND GREER	30,613.50
BARCLAYS DE ZOETE WEDD SECS LTD	30,264.41
WILLIAMS CAPITAL GROUP (THE)	29,910.00
ORMES CAPITAL MARKET	29,868.00
WHEAT FIRST SECURITIES, INC	29,683.00
FIBA NORDIC SECURITIES	29,104.95
SASSOON SINGAPORE	28,512.39
SANTANDER INVESTMENT SECURITIES	27,395.29
FURMAN SELZ MAGER DIETZ + BIRNEY, INC	27,253.84
MCDONALD + CO	27,164.84
WOOD GUNDY	26,515.39
CORRESPONDENT SERVICES, INC	26,089.40
SVENSKA HANDELSBANKEN	25,460.09
MIDLAND WALWYN	25,406.10
FLEDGELING NOMINEES INTERNATIONAL	25,289.84
GARANITIA INVESTMENTS	24,509.75
WORLD SECURITIES CO. LTD	24,421.41
ERNST + CO	24,029.00
AUTRANET, INC.	23,904.20
BSN SOCIEDAD MADRID	23,301.32
INDOSUEZ CAPITAL	23,142.59
PIPER JAFFRAY INC	22,859.00
FIRST PACIFIC STOCKBROKERS LTD.	22,571.51
JANNEY MONTGOMERY SCOTT	21,957.00
CONNING AND COMPANY	21,725.00
MICHAUX S.A.	21,454.47
IPS BROKERAGE INC.	21,415.50
CITIBANK	20,424.55
ORD MINNETT	19,881.10
RAYMOND JAMES AND ASSOCIATES, INC	19,541.00
HOENIG (FAR EAST) LIMITED	18,438.26
PETERCAM BRUSSELS	17,960.57
SSANGYONG INVESTMENT AND SECURITIES	17,043.37
I. STREICHER	$16,955.00
GERARD KLAUER MATTISON + CO.	16,880.90
BCI LONDON	16,245.70
BARCLAYS TRUST AND BANKING CO.	16,239.82
JACKSON PARTNERS + ASSOCIATES INC	16,008.00
FIRST ALBANY CORP.	15,889.80
PENNSYLVANIA GROUP	15,781.00
FRIEDMAN BILLINGS	15,730.00
SMH BANK (FRANKFURT)	15,629.60
ANZ MCCAUGHAN	15,306.19
INSINGER A DAM	15,292.53
RBC DOMINION SECURITIES	15,084.00
U.S.CLEARING CORPORATION	14,822.00
ARGENTARIA MADRID	14,677.85
SKANDINAVISKA ENSKILDA	14,406.00
NELLSON COBBOLD LTD	14,168.59
FACTUAL	14,150.99
IBSL	14,147.38
INTERSTATE/JOHNSON LANE CORP.	14,123.00
PANMURE GORDON + CO. LTD	13,946.26
PRYCE SECURITIES	13,743.43
ECZACIBASI SECS	13,584.79
ROBINSON HUMPHREY	13,126.00
GREIG MIDDLETON + CO	12,969.15
FACTSET DATA SYSTEMS	12,942.00
BANQUE NATIONAL DE PARIS	12,764.26
BLAIR WILLIAM AND COMPANY	12,628.00
CHARLES SCHWAB & CO., INC	12,575.00
PAULSEN DOWLING SECS	12,162.00
OCCBOND	12,088.41
GUNDME AND BAASCHU	11,970.44
PERSHING SECURITIES	11,925.94
BANK OF NEW YORK	11,896.89
PARIBAS CORP	11,637.94
WERTHEIM + CO., INC	11,470.39
LAWRENCE HELFANT, INC	11,450.00
BUCKINGHAM RESEARCH	11,440.00
HARGREAVE HALE	11,357.32
PETERBROECK VAN CAMPENHOUT + CIE BRUSSEL	10,892.01
BAIN + CO	10,829.55
BRIDGE TRADING	10,675.00
KEEFE BRUYETTE + WOODS, INC	10,620.00
CIMB SECURITIES SDN BHD	10,456.65
BANK GUTMAN	10,239.17
SPEAR LEEDS & KELLOGG	10,173.18
ADAMS HARKNESS + HILL, INC	10,128.00
Other Brokers (257)	705,673.25
Total Commissions	**$19,926,236.07**

Deferred Compensation Program

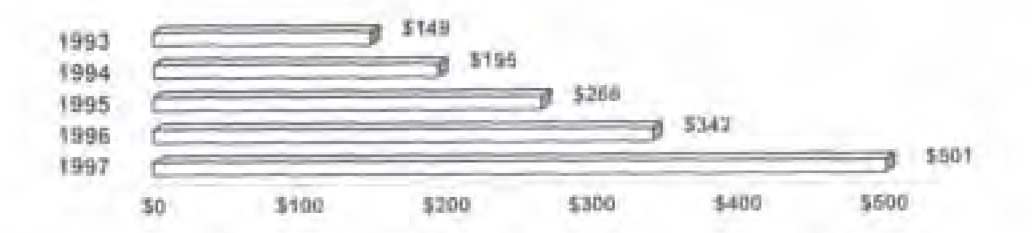
Implementation

Act 1987-81 assigned to the SERS Board of Trustees the responsibility to establish and monitor an Internal Revenue Code Section 457 Deferred Compensation Program for Commonwealth officers and employes through which members may volunteer to build retirement savings by deferring a portion of salary to selected investment options.

Growth of the Program

From July 1993 through July 1997, program assets more than tripled in value from approximately $149 million to over $501 million. In the period August 1996 through July 1997, assets increased by approximately $159.5 million. As of July 31, 1997, active participants numbered 28,381, and total market value of investments was $501,766,180.

Deferred Compensation Program July 1993 – July 1997 ($ in millions)



SERS Member Demographics

Year Ending December 31	Total Members	Active Employes	Annuitants & Beneficiaries
1997	194,141	108,684	85,457
1996	194,008	110,922	83,086
1995	193,841	112,637	81,204
1994	194,955	114,120	80,835
1993	192,652	111,962	80,690
1992	190,101	109,609	80,492
1991	181,971	105,731	76,240
1990	185,470	111,248	74,222
1989	182,649	109,819	72,830
1988	180,927	109,611	71,316

Active Employe Age and Service: December 31, 1997

Average Age: 45.07 Average Years of Service: 13.27

Annuitant, Beneficiary and Survivor Annuitant Ages and Pensions: December 31, 1996 and 1997

	Average Age: 1996	1997	Average Annual Pension: 1996	1997
Superannuation Annuitant	74.1	74.3	$10,150	$10,555
Early Retiree	57.7	57.9	$8,322	$8,779
Disabled Annuitant	59.4	59.4	$7,587	$7,895
Beneficiary/Survivor	75.0	75.1	$5,094	$5,312

Source: SERS annual Actuarial Reports prepared by Hay/Huggins Company.

SERS Funding

Employe and employer contributions and investment income flow into the fund to support the benefit payments to retired members and their survivors. Employe and employer contributions totaled approximately $537 million in 1997, while benefit payments exceeded $1 billion. Most SERS members contribute to the fund at a rate of 5 percent of salary. The Commonwealth's (employer) rate of contribution to the fund is actuarially determined each year. Investment performance can enable the Commonwealth to reduce the level of employer contributions. In fact, due in large part to investment returns in excess of the actuarially assumed rates of return, the employer contribution rate declined from 13.09 percent of payroll in fiscal year 1988-89 to 7.28 percent of payroll in fiscal year 1997-98.

Employe Contributions

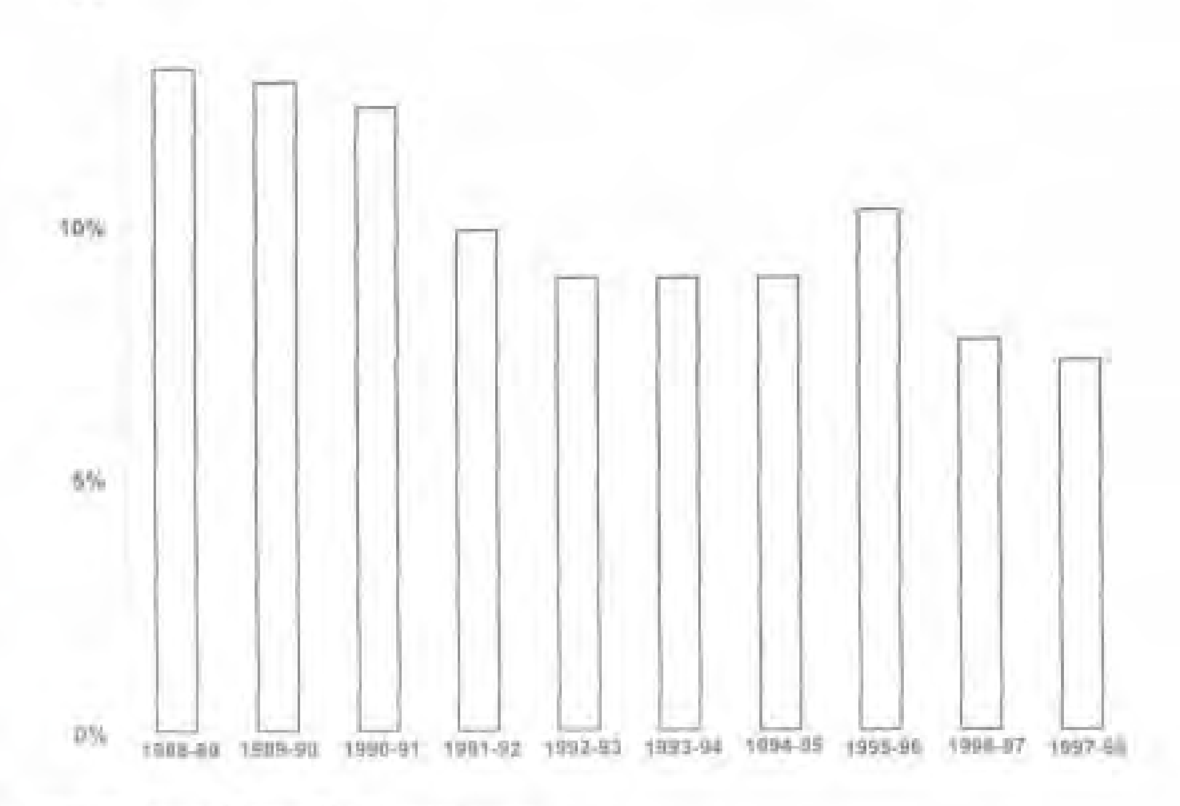
Employer Contributions

Investment Income

SERS Fund
$21.3 billion
as of
December 31, 1997

Benefit Payments

Employer Contribution Rate (percent of payroll)
By Fiscal Year 1988-89 through 1997-98



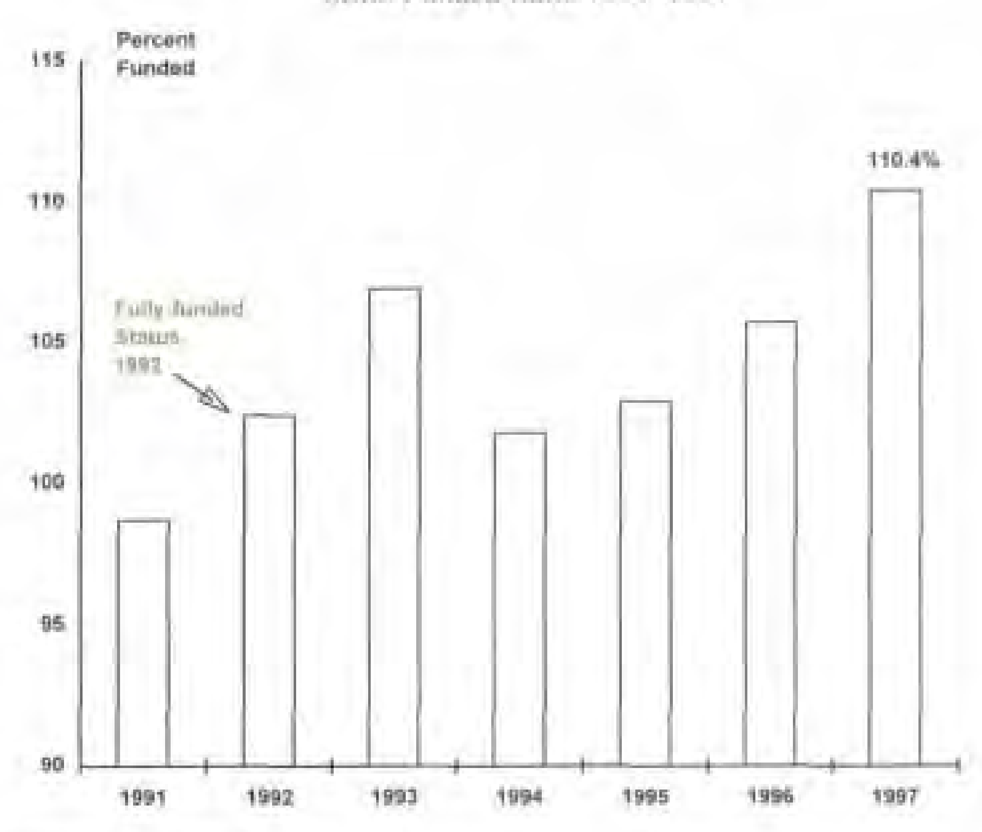
Source: *SERS* 1996 Actuarial Report, *Hay/Huggins Company*

Actuarial Soundness

Annually, SERS's consulting actuary performs an actuarial valuation, determining, among other things, the funded status of the benefit plan. In 1992, for the first time, the actuarial value of SERS fund assets exceeded the actuarial accrued liability. With adequate reserves set aside for past service liabilities, the plan had attained fully-funded status and has maintained that status since.

The chart below shows SERS's funded ratios for the period 1991 through 1997 determined in conformance with the reporting requirements of Statement No. 25 of the Governmental Accounting Standards Board (GASB). This measure reports the progress toward achieving the funding objectives of the plan using the same method employed to determine the plan's funding requirements. Under the standard of GASB Statement No. 25, the actuarial liability is calculated using assumptions consistent with those that determine the funding requirements of the plan and values the assets using an actuarial smoothing technique. Thus, the funded ratio is the actuarial value of assets divided by the actuarial accrued liability.

SERS Funded Ratio 1991–1997



Source: SERS actuary, Hay/Huggins Company

Hay/Huggins Company, Inc.
Actuarial and Benefits Consultants
1500 K Street, N.W.
Suite 1000
Washington, DC 20005
(202) 637-6600
Fax: (202) 637-0160

May 7, 1998

Hay/Huggins
Company

Retirement Board
Pennsylvania State Employes'
Retirement System
30 North Third Street
Harrisburg, Pa. 17101

Dear Board Members:

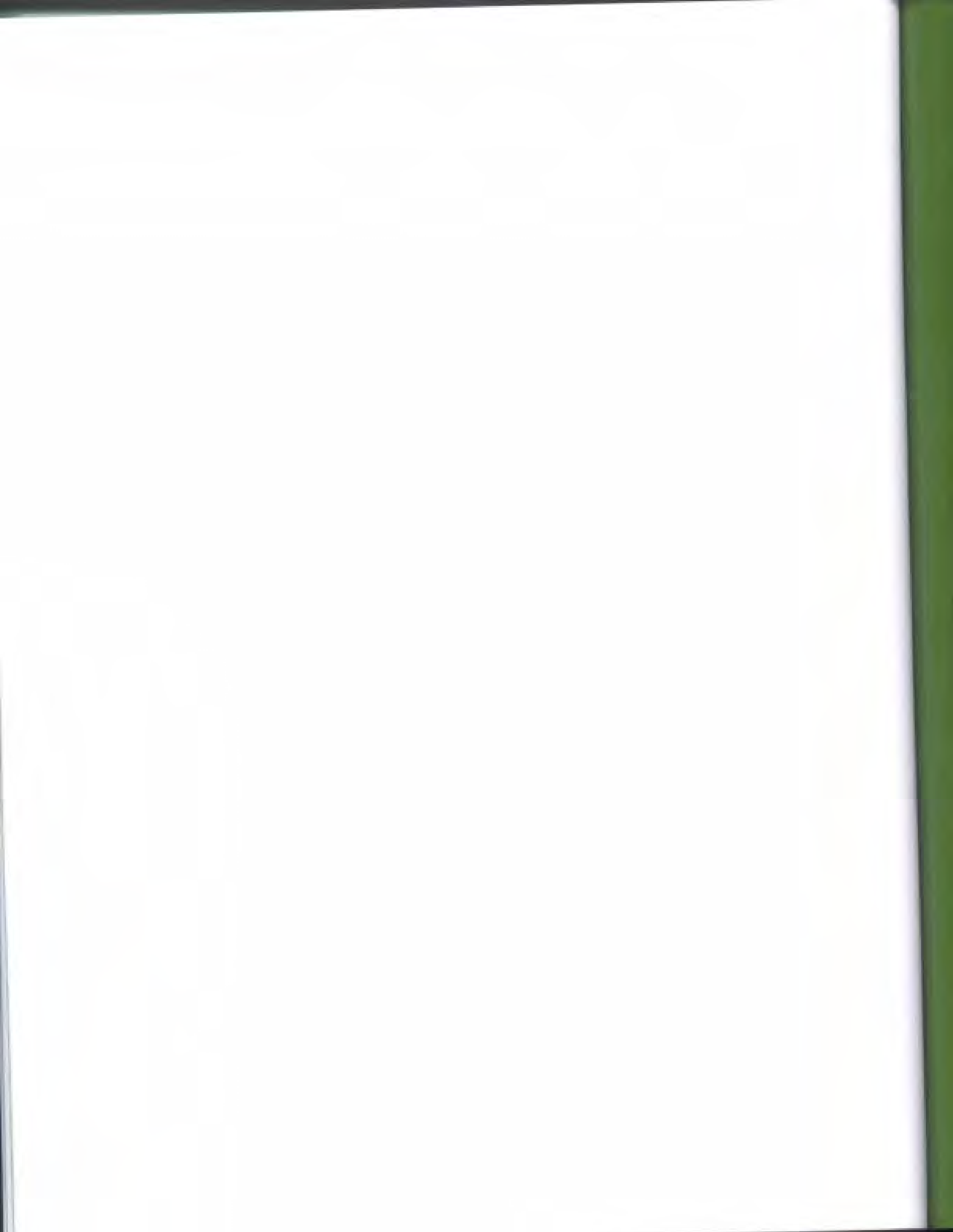
An actuarial valuation was last performed as of December 31, 1997 to determine actuarial liabilities under the Pennsylvania State Employes' Retirement System. The valuation was carried out in accordance with sound actuarial principles in a manner which, in my opinion, reflects the applicable provisions of the State Employes' Retirement Code. The valuation also served as the basis for determining the contributions required to be made by the Commonwealth to fund the liabilities of the System.

Valuations are made annually based on data supplied by the staff of the Retirement Board. The experience under the Retirement System is reviewed every five years. The last such review was for the period of 1991 to 1995. The results of the review are used to develop the assumptions underlying the actuarial valuations. Thus, required contributions are determined on a sound actuarial basis reflecting actual experience under the system.

Sincerely,

Edwin C. Hustead
Senior Vice President

HayGroup





INDEPENDENT AUDITORS' REPORT *and* FINANCIAL STATEMENTS

Section 4





225 Market Street
Suite 300
P.O. Box 1190
Harrisburg, PA 17108-1190

Independent Auditors' Report

The Board of Trustees
Commonwealth of Pennsylvania
State Employes' Retirement System:

We have audited the accompanying statements of plan net assets of the Commonwealth of Pennsylvania State Employes' Retirement System (a component unit of the Commonwealth of Pennsylvania) as of December 31, 1997 and 1996, and the related statements of changes in plan net assets for the years then ended. These financial statements are the responsibility of the System's management. Our responsibility is to express an opinion on these financial statements based on our audits.

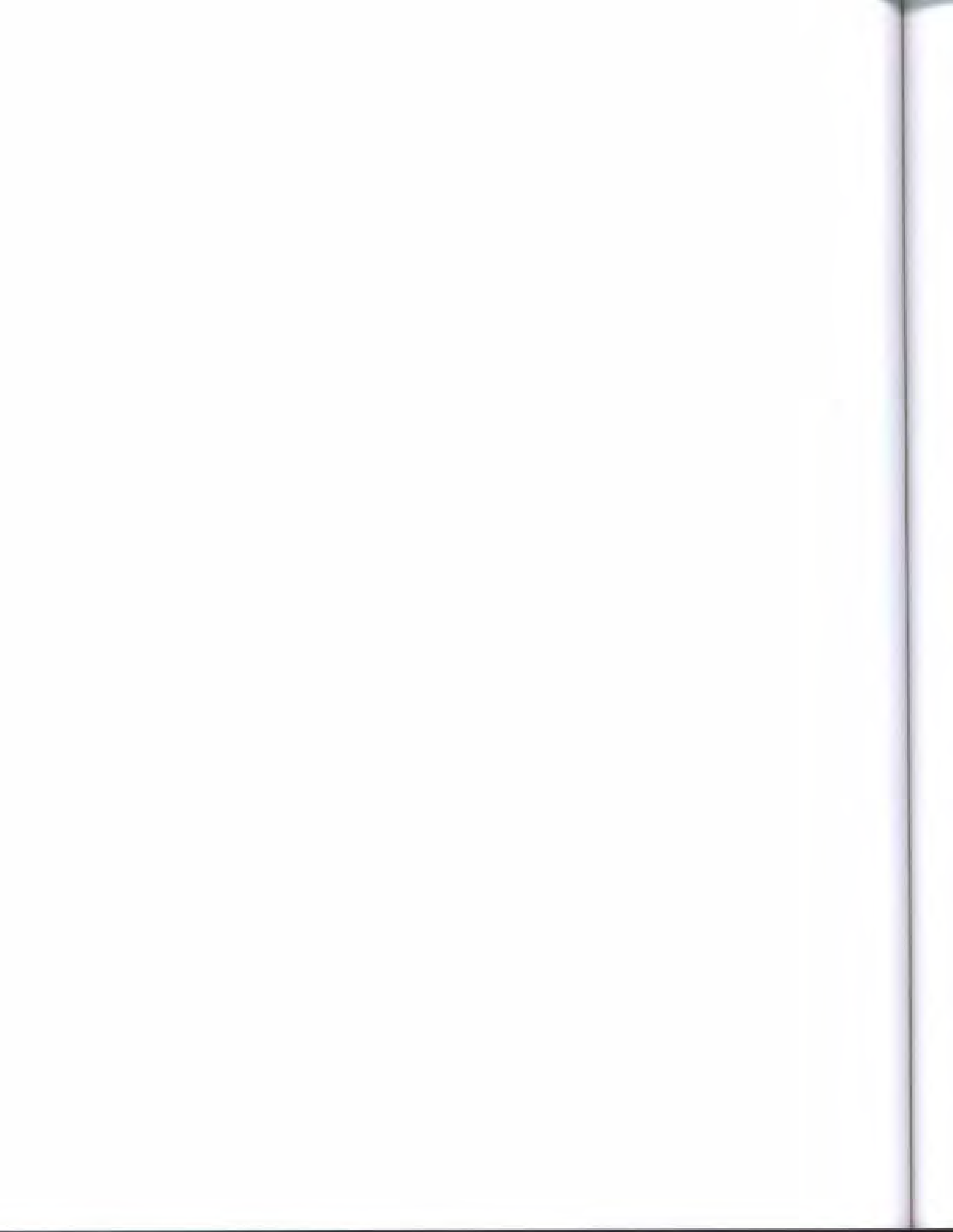
We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the plan net assets of the Commonwealth of Pennsylvania State Employes' Retirement System as of December 31, 1997 and 1996, and the changes in plan net assets for the years then ended in conformity with generally accepted accounting principles.

The information included in Required Supplemental Schedules 1 and 2 is not a required part of the basic financial statements but is supplementary information required by the Governmental Accounting Standards Board. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the supplementary information. However, we did not audit the information and express no opinion on it.

KPMG Peat Marwick LLP

April 30, 1998



COMMONWEALTH OF PENNSYLVANIA
STATE EMPLOYES' RETIREMENT SYSTEM
(a component unit of the Commonwealth of Pennsylvania)

Statements of Plan Net Assets

December 31, 1997 and 1996

(Amounts in thousands)

	1997	1996
Assets:		
Receivables:		
Plan members	$ 2,099	413
Employers	20,175	14,774
Investment income	94,040	97,345
Investment proceeds	105,737	130,113
Miscellaneous	372	694
Total receivables	222,423	243,339
Investments:		
Short-term investment fund	503,781	470,865
United States government securities	1,367,178	1,583,177
Corporate and foreign bonds and notes	2,860,786	2,635,494
Common and preferred stocks	7,409,959	6,513,695
Collective trust funds	6,426,362	5,280,749
Mortgage loans	274,553	406,983
Real estate	1,717,167	1,395,008
Venture capital and alternative investments	738,893	551,805
Total investments	21,298,679	18,837,776
Securities lending collateral pool	1,439,462	1,436,603
Total assets	22,960,564	20,517,718
Liabilities:		
Accounts payable and accrued expenses	20,623	23,601
Benefits payable	2,924	1,747
Investment purchases payable	185,784	563,551
Obligations under securities lending	1,439,462	1,436,603
Total liabilities	1,648,793	2,025,502
Net assets held in trust for pension benefits (A schedule of funding progress is presented on page 57)	$ 21,311,771	18,492,216

See accompanying notes to financial statements.

COMMONWEALTH OF PENNSYLVANIA
STATE EMPLOYES' RETIREMENT SYSTEM
(a component unit of the Commonwealth of Pennsylvania)

Statements of Changes in Plan Net Assets

Years ended December 31, 1997 and 1996

(Amounts in thousands)

		1997	1996
Additions:			
Contributions:			
Plan members	$	212,556	209,581
Employers		324,093	373,902
Total contributions		536,649	583,483
Investment income:			
Net appreciation in fair value of investments		1,302,080	1,089,629
Collective trust income		1,491,868	953,325
Interest		345,323	334,242
Dividends		115,749	103,206
Real estate		98,897	59,402
Miscellaneous		31,442	22,629
		3,385,359	2,562,433
Investment expenses		(72,059)	(59,382)
Net income from investing activities		3,313,300	2,503,051
From securities lending activities:			
Securities lending income		93,672	80,350
Securities lending expenses		(86,803)	(74,071)
Net income from securities lending activities		6,869	6,279
Total net investment income		3,320,169	2,509,330
Total additions		3,856,818	3,092,813
Deductions:			
Benefits		1,008,648	918,218
Refunds of contributions		13,073	10,126
Administrative expenses		15,542	15,062
Total deductions		1,037,263	943,406
Net increase		2,819,555	2,149,407
Net assets held in trust for pension benefits:			
Balance, beginning of year		18,492,216	16,342,809
Balance, end of year	$	21,311,771	18,492,216

See accompanying notes to financial statements.

(1) Organization and Description of the System

Organization

The Commonwealth of Pennsylvania State Employes' Retirement System (the System) was established as of June 27, 1923, under the provisions of Public Law 858, No. 331.

The System is the administrator of a cost-sharing multiple-employer defined benefit retirement system established by the Commonwealth of Pennsylvania (Commonwealth) to provide pension benefits for employes of state government and certain independent agencies. The System is a component unit of the Commonwealth of Pennsylvania and is included in the Commonwealth's financial report as a pension trust fund.

The System is established by state law as an independent administrative board of the Commonwealth and is directed by a governing board that exercises control and management of the System, including the investment of its assets. The System's board has eleven members including the State Treasurer, ex officio, two Senators or former Senators, two members or former members of the House of Representatives, and six members appointed by the Governor, one of whom is an annuitant of the System. At least five board members are active members of the System and at least two have ten or more years of credited service.

The Treasurer of the Commonwealth of Pennsylvania is the custodian of the State Employes' Retirement System's fund.

The System's financial reporting entity includes several real estate title holding companies, which are presented as blended component units. These legally separate companies, which are created for the purpose of investing System funds in individual real estate holdings, have Boards of Directors comprised entirely of System personnel appointed by the System's Executive Director under authority from the System's Board of Directors.

Membership in the System is mandatory for most state employes. Members and employes of the General Assembly, certain elected or appointed officials in the executive branch, department heads, and certain employes in the field of education are not required, but are given the option, to participate. At December 31, 1997 and 1996, System membership consisted of:

	1997	1996
Retirees and beneficiaries currently receiving benefits	85,457	83,086
Terminated employes entitled to benefits but not yet receiving them	4,643	4,375
Current employes	108,684	110,922
Total members	198,784	198,383
Number of participating agencies	107	108

(Continued)

(1) Continued

Pension Benefits

The System provides retirement, death, and disability benefits. Generally, retirement benefits vest after 10 years of credited service. Ad hoc cost-of-living adjustments are provided at the discretion of the General Assembly. There were no ad hoc postretirement benefit increases in 1997 or 1996. Article II of the Commonwealth of Pennsylvania's Constitution assigns the authority to establish and amend the benefit provisions of the plan to the General Assembly. Employes who retire at age 60 with 3 years of service, or with 35 years of service if under age 60, are entitled to a normal annual retirement benefit. Members of the General Assembly and certain employes classified in hazardous duty positions can retire with full benefits at age 50, with at least 3 years of service.

On April 29, 1994, Act 29 was signed into law, which permitted certain participants with at least 30 years of credited service to retire without a reduction in benefits until June 30, 1997 (retroactive to July 1, 1993). This early retirement window did not require a minimum age in conjunction with length of service for a member to be eligible for full benefits.

On April 2, 1998, Act 41 was signed into law which again permitted certain participants with at least 30 years of credited service to retire without a reduction in benefits from July 1, 1998 to June 30, 1999.

The general annual benefit is 2% of the member's highest three-year average salary times years of service. Members of the General Assembly who were members of the System before March 1, 1974, are entitled to a benefit of 7.5% of final average salary for each year of service. State police are entitled to a benefit equal to a percentage of their highest annual salary, excluding their year of retirement. The benefit is 75% of salary for 25 or more years of service and 50% of salary for 20-24 years of service. Judges are entitled to a benefit of 4% of final average salary for each of the first 10 years of service and 3% for subsequent years. District Justices are entitled to a benefit of 3% of final average salary for each year of service.

According to the Retirement Code, all obligations of the System will be assumed by the Commonwealth should the System terminate.

(Continued)

(1) Continued

Contributions

The System's funding policy, as set by the System's Board, provides for periodic active member contributions at statutory rates. The System's funding policy also provides for periodic employer contributions at actuarially determined rates, expressed as a percentage of annual covered payroll, such that they, along with employe contributions and an actuarially determined rate of investment return, are adequate to accumulate assets to pay benefits when due. Employer contribution rates are determined using a variation of the entry age normal actuarial funding method. A variation of the entry age normal actuarial cost method is used to determine the liabilities and costs related to all of the System's benefits including superannuation, withdrawal, death, and disability benefits. The significant difference between the method used for the System and the typical entry age normal actuarial cost method is that the normal cost is based on the benefits and contributions for new employes rather than for all current employes from their date of entry. This variation should produce approximately the same results as the typical method over the long run. These rates are computed based upon actuarial valuations on the System's fiscal year end of December 31 and applied to the Commonwealth based on its fiscal year end June 30; therefore, the employer contribution rates in effect for the System's year end of December 31 reflect a blended average of calculated rates. The blended contribution rates were as follows:

	1997	1996
Employer normal cost	8.69 %	9.61 %
Amortization of unfunded actuarial asset	(2.70)	(2.09)
Amortization of supplemental annuities	1.50	1.46
Total employer cost	7.49 %	8.98 %

Generally, employes are required to contribute to the System at a rate of 5% of their gross pay. Judges and district justices have the option of electing special membership classes requiring a contribution of 10.0% and 7.5%, respectively. The contributions are recorded in an individually identified account that also is credited with interest, calculated at 4% per annum, as mandated by statute. Accumulated employe contributions and credited interest vest immediately and are returned to the employe upon termination of service if the employe is not eligible for other benefits.

(Continued)

(2) Summary of Significant Accounting Policies

Basis of Accounting

The financial statements of the System are prepared on the accrual basis of accounting under which expenses are recorded when the liability is incurred, revenues are recorded in the accounting period in which they are earned and become measurable, and investment purchases and sales are recorded as of their trade date. Member and employer contributions are recognized in the period in which employes' salaries are reported. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

The System follows GASB guidance as applicable to proprietary funds and applies only those applicable Financial Accounting Standards Board (FASB) Statements and Interpretations, Accounting Principles Board Opinions, and Accounting Research Bulletins issued on or before November 30, 1989, that do not conflict with or contradict GASB pronouncements.

Use of Estimates

Management of the System has made certain estimates and assumptions relating to the reporting of assets and liabilities, and the disclosure of contingent assets and liabilities, to prepare these financial statements in conformity with generally accepted accounting principles. Actual results could differ from those estimates.

Investments

The System's investments are reported at fair value. Fair value is the amount that a plan can reasonably expect to receive for an investment in a current sale between a willing buyer and a willing seller–that is, other than in a forced or liquidation sale. The investment in the short-term investment fund, which is a fund operated by the Treasurer of the Commonwealth of Pennsylvania, is reported at cost plus allocated interest, which approximates fair value. The security lending collateral pool, which is a fund operated by the securities lending agent, also is accounted for at cost plus accrued interest. U.S. government obligations, corporate and foreign bonds and notes, and common and preferred stocks, including collective trust funds, are generally valued based on published market prices and quotations from national security exchanges and securities pricing services. Securities that are not traded on a national security exchange are valued by the asset manager or third parties based on similar sales. Mortgage loans are valued by the asset manager using the present value of future cash flows. Real estate is primarily valued based on appraisals performed by independent appraisers or, for properties not appraised, at the present value of the projected future net income stream. Venture capital and alternative investments, which include leveraged buyouts, international private equities, and other investments, are valued based on amounts established by valuation committees. Foreign exchange contracts, which are not reported in the statement of plan net assets, are marked-to-market daily with changes in fair value recognized as part of investment income.

(Continued)

(2) Continued

The Collective Trust Funds (CTF) consist primarily of domestic and international institutional index funds. The funds do not pay interest or dividends to shareholders, and reinvest all income earned on securities held by the fund. CTF income includes net appreciation on the fair value of CTF investments.

Unsettled investment sales are reported as investment proceeds receivable and unsettled investment purchases are reported as investment purchases payable. Investment expenses consist of investment managers' fees and those administrative expenses directly related to the System's investment operations.

Commitments

As of December 31, 1997, the System had contractual commitments totaling approximately $1,308 million to participate in future real estate, venture capital, and alternative investments.

Compensated Absences

The System accrues a liability for vacation leave as the benefits are earned by the employes to the extent the System will compensate the employe for the benefits through paid time off or some other means, such as cash payments at termination or retirement. Vacation leave vests 100% at the time it is earned up to 45 days, which are carried over to the next year at December 31. The System also accrues a liability for sick leave as the benefits are earned by the employes to the extent the System will compensate the employe for the benefits through cash payments at termination or retirement. Retiring employes of the System that meet service, age, or disability requirements are paid between 30% and 100% of sick days available at retirement, up to 163 maximum days. As of December 31, 1997 and 1996, $1,374,669 and $1,262,170, respectively, was accrued for unused vacation and sick leave for the System's employes.

Administrative Expenses

Administrative expenses are financed through investment earnings.

Federal Income Taxes

Management believes the System meets the definition of a Governmental Plan; in the System's communications with the Internal Revenue Service (IRS), it has been treated as a qualified plan. Therefore, the System has not requested a determination letter from the IRS relating to the status of the System under the Internal Revenue Code.

(Continued)

(2) Continued

The real estate holding companies discussed in note 1 are formed and operate under the Internal Revenue Code 501(c)(25) and are exempt from federal taxes on income related to their tax exempt purpose.

Risk Management

The System is exposed to various liabilities or risks of loss related to theft or destruction of assets, injuries to employes, and court challenges to fiduciary decisions. To cover such risks, the System carries directors and officers' liability insurance, and fiduciary liability insurance. It also requires asset managers to carry appropriate insurance policies. As an administrative agency of the Commonwealth, the System is accorded sovereign immunity, and it participates in a state property insurance program. As Commonwealth employes, the System's employes receive health insurance benefits, disability retirement benefits, and worker's compensation benefits.

Reclassifications

Certain reclassifications were made to the fiscal year 1996 financial statements to conform with the fiscal year 1997 financial statement presentation.

(3) Description of Funds

The Code requires the System to maintain the following funds representing the reserves held for future and current benefit payments as follows:

Members Savings Account – The fund that accumulates contributions and interest earnings of active employes totaled $2,748 million and $2,646 million as of December 31, 1997 and 1996, respectively.

State Accumulation Account – The fund that accumulates contributions of the employers and the earnings of the fund totaled $12,599 million and $10,362 million as of December 31, 1997 and 1996, respectively. The balance of this fund is actuarially determined.

Annuity Reserve Accounts – The funds from which all death and retirement benefits and supplemental annuities are paid totaled $5,614 million and $5,166 million for Annuitants and Beneficiaries; $1,031 million and $1,002 million for State Police; and $20 million and $20 million for Enforcement Officers as of December 31, 1997 and 1996, respectively. The balance of this fund is actuarially determined.

(Continued)

(3) Continued

Supplemental Annuity Account – The fund that accumulates contributions for supplemental annuities totaled $(701) million and $(704) million, as of December 31, 1997 and 1996, respectively. The balance of this fund is actuarially determined. The negative balances represent the liability for past cost of living adjustments that are being amortized to actuarial required contributions over a period of 20 years from the effective date of each supplement.

Interest Reserve Account – The fund that accumulates all income earned by the fund and from which all administrative and investment expenses incurred by the fund and the Board necessary for operation of the System are paid. Any balance in this reserve is transferred to the State Accumulation Account at year end.

(4) Investments

As provided by statute, the System's Board of Trustees (Board) has exclusive control and management responsibility of System funds and full power to invest the funds. In exercising its fiduciary responsibility to System membership, the Board is governed by the "prudent person" rule, which requires the exercise of due care in establishing investment policy, and has adopted its *Statement of Investment Policy* to formally document investment objectives and responsibilities. This policy, as well as applicable state law, establishes guidelines for permissible investments of the System, including all investment types held in the portfolio at December 31, 1997 and 1996, and at all times during those years.

The System's investments are categorized below to give an indication of the level of credit (counterparty) risk assumed by the System at December 31, 1997 and 1996. In accordance with a contractual relationship between the Commonwealth's Treasury Department and its custodial agent, substantially all investments subject to categorization are held in book-entry form in the Commonwealth's name. Therefore, all such investments are in Category 1, which is defined as insured or registered investments for which the securities are held by the System or its agent in the System's name.

(Continued)

(4) Continued

Investments may also be categorized as Category 2, which is defined as uninsured or unregistered investments for which the securities are held by the counterparty's trust department or agent in the System's name, and Category 3, which is defined as uninsured or unregistered investments for which the securities are held by the broker or dealer or by its agent but not in the System's name. However, the System does have investments that are not in any of the three defined categories because the securities are not used as evidence of the investment. Such investments are separately identified.

		1997	1996
Investments – Category 1			
United States government securities	$	892,970	1,183,065
Corporate and foreign bonds and notes		2,257,166	2,407,150
Common and preferred stocks		6,945,184	5,639,654
Total Category 1 investments		10,095,320	9,229,869
Investments – not categorized			
Investments held by broker/dealers under securities lending agreement:			
United States government securities		474,208	400,112
Corporate and foreign bonds and notes		603,620	228,344
Common and preferred stocks		464,775	874,041
Short-term investment fund		503,781	470,865
Collective trust funds		6,426,362	5,280,749
Mortgage loans		274,553	406,983
Real estate		1,717,167	1,395,008
Venture capital and alternative investments		738,893	551,805
Total not-categorized investments		11,203,359	9,607,907
Total investments	$	21,298,679	18,837,776

The System's real estate holdings that are located in the Commonwealth of Pennsylvania total approximately $303 million and $223 million or 17.6% and 16.1% of the real estate portfolio at December 31, 1997 and 1996, respectively. Concentrations of investments in a particular geographic area have certain risks and uncertainties associated with the concentration. The System's remaining real estate investments are not concentrated in any one geographic area or industry.

(Continued)

(4) Continued

The System's investments in corporate and foreign bonds and notes include approximately $725 million and $650 million of high yield bonds at December 31, 1997 and 1996, respectively.

The fair value of individual investments that represent 5% or more of the System's net assets available for benefits are as follows (amounts in thousands):

		1997	1996
Barclays Global Investors N.A.:			
Equity Index Fund P – 113,172,093 and 113,172,080 units in 1997 and 1996, respectively	$	4,003,943	3,003,175
70/30 Enhanced U.S. Tactical Asset Allocation Fund – 41,030,514 and 41,889,414 units in 1997 and 1996, respectively		1,147,838	945,313

The 70/30 Enhanced U.S. Tactical Asset Allocation Fund is diversified among three collective funds: equity, which is invested primarily in Standard & Poor's 500 Companies; long-term fixed income, which is invested in corporate notes and bonds; and the short-term cash fund, which is invested in money market instruments.

The System also invests in fixed income derivatives such as collateral mortgage obligations (CMOs) to increase the return to the portfolio. Some forms of the System's CMOs, namely planned amortization class securities, offer more defined cash flow characteristics, and are therefore preferred in volatile interest rate environments. Other types of the System's CMOs (interest-only strips, principal only strips, and inverse floaters) behave less predictably but can offer value in certain market conditions. CMOs pose no greater credit risk than any other investment grade holding; therefore, significant defaults are not anticipated. Investment managers control credit risk through credit evaluation and ongoing performance analysis. However, underlying risk exists to the extent that an underlying security of a pool does not meet or perform according to the terms of the CMO. Under the circumstances, the CMO has well defined rules on the remittance of the reserve pools for principal and interest for defaulted collateral. The fair value of CMOs at December 31, 1997 and 1996 was approximately $330 million and $172 million, respectively.

Through the collective trust funds, the System also indirectly holds certain derivative financial instruments. The collective trust funds participate in securities lending and invest cash collateral in an investment pool that invests in foreign exchange forwards, futures contracts, and asset, total return, and basis swap contracts. These instruments are held to hedge foreign exchange exposure, to synthetically create floating rate returns, and to manage interest rate risk by altering the average life of the portfolio.

(Continued)

(4) Continued

Commission Recapture Program

The System has commission recapture contracts with several brokers. These contracts stipulate that the brokers pay a percentage of commissions earned on investments directly to vendors for services provided to the System. During the year ended December 31, 1997 and 1996, the System earned $1,365,000 and $867,000 of benefits resulting from a commission recapture program, respectively. The System used the program to pay approximately $166,000 and $746,000 on consulting, advisory, and other expenditures for the years ended December 31, 1997 and 1996, respectively. At December 31, 1997 and 1996, the System has accumulated $1,745,000 and $546,000, respectively, of benefits that are available for future expenditures.

Securities Lending

In accordance with a contract between the Commonwealth's Treasurer and its custodian, the System participates in a securities lending program. State statutes neither specifically authorize nor prohibit the lending of the System's securities.

The custodian, acting as lending agent, lends the System's equity, debt, and money market securities for cash, securities, or letter-of-credit collateral. Collateral is required at 102% of the fair value of the securities loaned except for the equity securities of non-U.S. corporations, for which collateral of 105% is required. Collateral is marked-to-market daily. If the collateral falls below guidelines for the fair value of the securities loaned, additional collateral is obtained. Cash collateral is invested by the lending agent in accordance with investment guidelines approved by the Treasurer. The lending agent cannot pledge or sell securities collateral unless the borrower defaults.

As of December 31, 1997 and 1996, the System's credit exposure to individual borrowers was limited because the amounts the System owed the borrowers exceeded the amounts the borrowers owed the System. The Treasurer's contract with the lending agent requires the agent to indemnify the System if the borrowers fail to return the underlying securities and the collateral is inadequate to replace the loaned securities or if the borrowers fail to pay income distributions on the loaned securities.

(Continued)

(4) Continued

All securities loans at December 31, 1997 and 1996 could be terminated on demand by either the lending agent or the borrower. Cash collateral is invested, together with the cash collateral on securities loans of some other Commonwealth entities, in a short-term collective investment pool. The duration of the investments in the pool at December 31, 1997 and 1996, was 60 days and 53 days, respectively. The relationship between the average maturities of the investment pool and the System's loans is affected by the maturities of the loans made by other entities in the investment pool. In addition, the interest rate risk posed by mismatched maturities is affected by other program features, such as the lending agent's ability to reallocate securities loans among all of its lending customers.

As of December 31, 1997 and 1996, respectively, the fair market value of loaned securities was $1,542,603,000 and $1,502,497,000; the fair value of the associated collateral was $1,593,520,000 and $1,559,979,000 of which $1,439,462,000 and $1,436,603,000 was cash. The securities lending collateral pool is not categorized because securities are not used as evidence of the investment.

(5) Financial Instruments with Off-Balance Sheet Risk

The System enters into foreign exchange contracts, such as forward and spot contracts, to hedge foreign currency exposure. The System is not a dealer but an end-user of these instruments. The contracts are used primarily to enhance performance and reduce the volatility of the portfolio. Contracts used to enhance performance are fully collateralized, eliminating the use of leverage in the portfolio. The System is exposed to credit risk in the event of nonperformance by counterparties to financial instruments. As the System generally enters into transactions only with high quality institutions, no losses associated with counterparty nonperformance on derivative financial instruments have been incurred. Legal risk is mitigated through careful selection of brokers and an extensive process of review of all documentation. The System is exposed to market risk—the risk that future changes in market conditions may make an instrument less valuable. Exposure to market risk is managed within risk limits set by management by buying or selling instruments or entering into offsetting positions.

(Continued)

(5) Continued

At December 31, 1997, the System had contracts maturing through December 3, 1998, to purchase or sell foreign currency as follows (amounts in thousands):

		Buy at spot rate	Sell at spot rate	Net (payable) receivable
Deutschmark	$	482,588	921,162	(438,574)
French Franc		189,828	342,211	(152,383)
Pound Sterling		645,662	858,598	(212,936)
Japanese Yen		554,474	789,793	(235,319)
Swedish Kroner		13,450	104,156	(90,706)
Swiss Franc		120,154	181,453	(61,299)
Other		206,945	371,586	(164,641)
	$	2,213,101	3,568,959	(1,355,858)

At December 31, 1996, the System had contracts maturing through December 4, 1997, to purchase or sell foreign currency as follows (amounts in thousands):

		Buy at spot rate	Sell at spot rate	Net (payable) receivable
Deutschmark	$	330,865	698,533	(367,668)
French Franc		194,988	298,055	(103,067)
Pound Sterling		381,884	546,215	(164,331)
Japanese Yen		176,666	416,169	(239,503)
Swedish Kroner		–	105,265	(105,265)
Other		209,564	445,536	(235,972)
	$	1,293,967	2,509,773	(1,215,806)

Net unrealized gains on foreign currency contracts were approximately $50.6 million and $13.2 million at December 31, 1997 and 1996, respectively.

(Continued)

(6) Pension Plan for Employes of the System

The System also makes contributions to the System as an employer. The System's employes' contribution requirements and benefits are described in note 1 to these financial statements. The System's contributions for the years ended December 31, 1997, 1996, and 1995 were $466,731; $555,817; and $573,658, respectively, which were equal to the required contributions each year.

(7) Litigation and Contingencies

The System is involved in various individual lawsuits, generally related to benefit payments, which, if settled adversely, could increase estimated actuarial liabilities by up to one billion dollars. The individual cases involve legal issues that, if extended to the entire membership, may result in significant costs to the System. If such an event were to occur, the additional costs would be recovered by the System through adjustments to the employer contribution rate.

COMMONWEALTH OF PENNSYLVANIA
STATE EMPLOYES' RETIREMENT SYSTEM
(a component unit of the Commonwealth of Pennsylvania)

Required Supplemental Schedule 1

Schedule of Funding Progress

(Unaudited – see accompanying auditors' notes)

(dollar amounts in millions)

Actuarial valuation year	Actuarial value of assets	Actuarial accrued liabilities (AAL)	Unfunded actuarial accrued liabilities (UAAL)	Ratio of assets to AAL	Covered payroll	UAAL as a percentage of covered payroll
1996	$ 16,841.1	15,936.6	(904.5)	105.7 %	3,996.0	(22.6) %
1995	15,510.3	15,067.2	(443.1)	102.9	3,861.0	(11.5)
1994	13,991.5	13,742.1	(249.4)	101.8	3,713.7	(6.7)
1993	13,060.6	12,213.7	(846.9)	106.9	3,487.5	(24.3)
1992	11,769.4	11,488.4	(281.0)	102.4	3,284.4	(8.6)
1991	10,790.2	10,937.8	147.6	98.7	3,221.1	4.6

Required Supplemental Schedule 2

Schedule of Employer Contributions

(dollar amounts in thousands)

Year ended December 31	Annual required contributions	Percentage contributed
1996	$ 373,902	100.0 %
1995	376,692	102.1
1994	342,158	100.2
1993	310,089	98.1
1992	319,093	100.0
1991	381,347	100.0

See accompanying notes to required supplementary schedules.

COMMONWEALTH OF PENNSYLVANIA
STATE EMPLOYES' RETIREMENT SYSTEM
(a component unit of the Commonwealth of Pennsylvania)

Notes to Required Supplemental Schedules

(Unaudited – see accompanying auditors' report)

Actuarial information as of the latest actuarial valuation:

Valuation date	December 31, 1996
Actuarial cost method	*Variation of entry age actuarial cost method
Amortization method	Increasing (5 percent annually)
Remaining amortization period	14 to 19 years, closed
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Investments rates of return**	8.5%
Projected salary increases**	5.16% - 8.98%
**Includes inflation at	3%
Cost-of-living adjustments	None

* A variation of the entry age normal actuarial cost method is used to determine the liabilities and costs related to all of the System's benefits including superannuation, withdrawal, death and disability benefits. The significant difference between the method used for the System and the typical entry age normal actuarial cost method is that the normal cost is based on the benefits and contributions for new employes rather than for all current employes from their date of entry. This variation should produce approximately the same results as the typical method over the long run.

Information presented in the required supplementary schedules was determined as part of the actuarial valuation at the dates indicated. In 1997, there were no significant changes in the factors which affect the actuarial valuation as of December 31, 1996.

Significant Changes in Prior Years

Certain changes have been made in the plan or in actuarial assumptions that affect the trends in the amounts reported in the schedule of funding progress. Those changes also affected the trend in the annual required contributions reported in the schedule of employer contributions. Those changes were effective for the actuarial valuation report dated as of December 31, 1995.

(Continued)

For actuarial valuations through December 31, 1994, actuarial assumptions were as follows:

Actuarial assumptions:	
Investments rates of return	9.25%
Projected salary increases	6.70%

In addition the demographic assumption was changed from the 1971 Group Annuity Mortality Table (GAM - 71) to the 1983 Group Annuity Mortality Table (GAM - 83) for current and future employes to reflect continuing mortality improvement. The GAM - 71 continues to apply for current retirees.

Also, in 1994, the actuarial assumption changed to reflect the adoption of a new pay scale that became effective January 1, 1994, and compressed the previous schedule of 35 steps to 20 steps. The new scale provides longevity increases for members who have at least one year of service. In addition, Act 1994-29 provided for a cost-of-living adjustment (COLA) to annuitants with an effective date of retirement on or prior to June 30, 1992.

In the valuation years ended December 31, 1996, 1995, 1993, and 1991, actual investment earnings exceeded the expected rates of return, thereby causing an increase in the valuation years' actuarial value of assets reported in the schedule of funding progress and reduction in the following years' annual required contribution reported in the schedule of employer contributions.

Pending Legislation

As of April 30, 1998 legislation was pending which would provide for a cost of living adjustment on July 1, 1998. The System anticipates this legislation will be enacted during the second quarter of 1998. The estimated effect of this would be to increase actuarial accrued liabilities by approximately $475 million.





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